

## Packet #3 - D1

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each equation.**

1)  $-8 - 4v - 3v = 20$

2)  $4b + 5b = 0$

3)  $-3 = x + 6 - 1$

4)  $24 = 4x + 4x$

5)  $-4(7b + 4) = -184$

6)  $-392 = 8(-1 + 6n)$

7)  $90 = 3(6 + 4n)$

8)  $-5(3 + 6n) = 165$

9)  $8(6 - b) = -3(4 + 6b) + 4b$

10)  $-(2p + 3) - 5 = 7p - (2p + 8)$

$$11) -2 - 2(7 - 2a) = -5(a - 4)$$

$$12) -8 + 2(3v - 2) = -3(5v - 3)$$

**Factor each completely.**

$$13) r^2 + 11r + 24$$

$$14) 6r^2 + 66r + 60$$

$$15) 3x^2 + 9x + 6$$

$$16) 2a^2 - 30a + 108$$

$$17) 5p^2 - 45$$

$$18) n^2 + 6n$$

$$19) m^2 - 10m$$

$$20) 3r^2 + 27r + 60$$

$$21) p^2 - 6p - 40$$

$$22) 3r^2 + 12r$$

## Answers to Packet #3 - D1 (ID: 1)

1)  $\{-4\}$

5)  $\{6\}$

9)  $\{-10\}$

13)  $(r+8)(r+3)$

17)  $5(p-3)(p+3)$

21)  $(p-10)(p+4)$

2)  $\{0\}$

6)  $\{-8\}$

10)  $\{0\}$

14)  $6(r+1)(r+10)$

18)  $n(n+6)$

22)  $3r(r+4)$

3)  $\{-8\}$

7)  $\{6\}$

11)  $\{4\}$

15)  $3(x+1)(x+2)$

19)  $m(m-10)$

4)  $\{3\}$

8)  $\{-6\}$

12)  $\{1\}$

16)  $2(a-6)(a-9)$

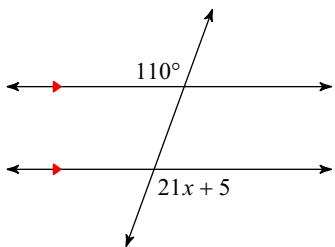
20)  $3(r+5)(r+4)$

## Packet #3 - D2

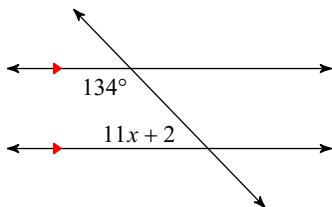
Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve for  $x$ .**

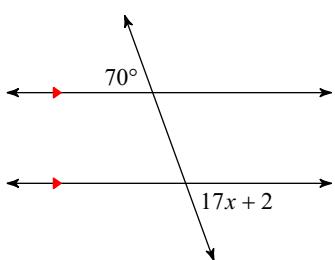
1)



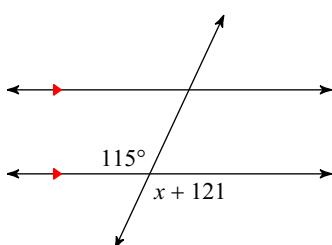
2)



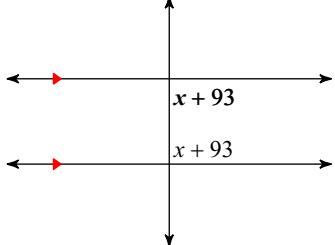
3)



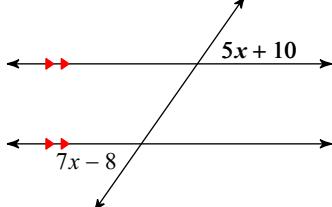
4)

**Find the measure of the angle indicated in bold.**

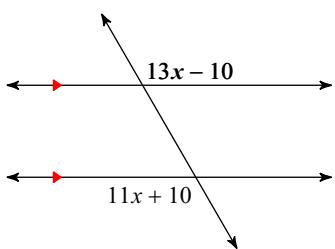
5)



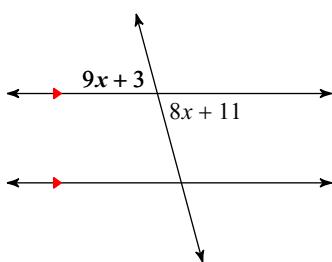
6)



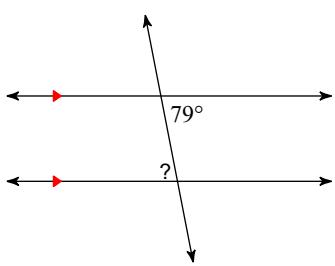
7)



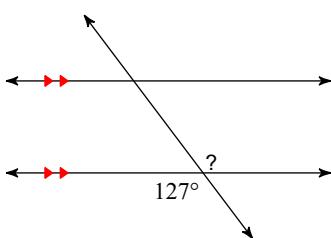
8)

**Find the measure of each angle indicated.**

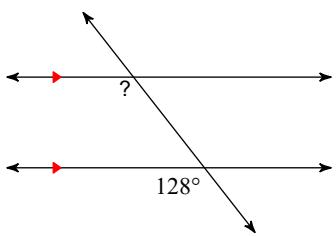
9)



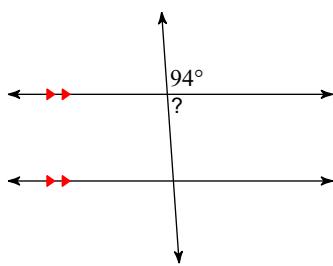
10)



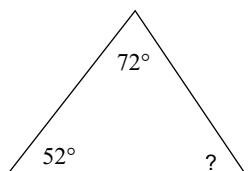
11)



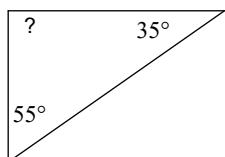
12)



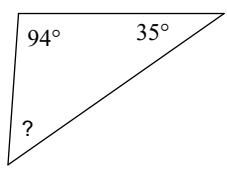
13)



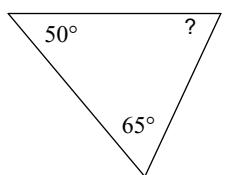
14)



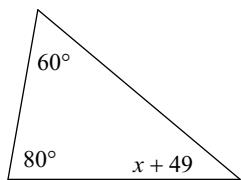
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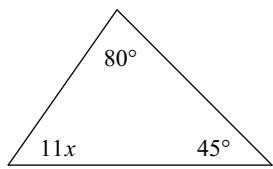
16)

**Solve for  $x$ .**

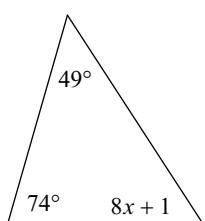
17)



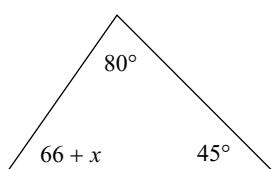
18)



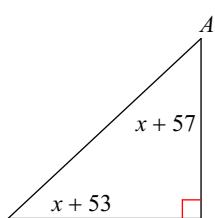
19)



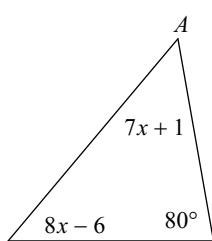
20)

**Find the measure of angle A.**

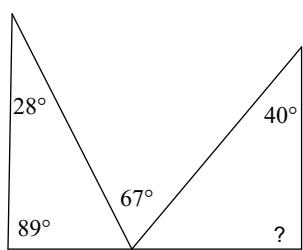
21)



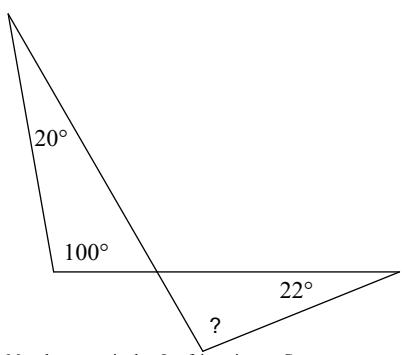
22)

**Find the measure of each angle indicated.**

23)



24)

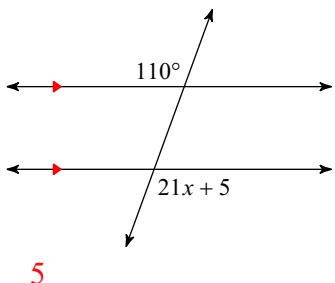


## Packet #3 - D2

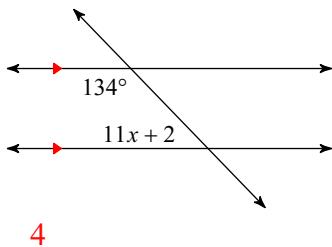
Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve for  $x$ .**

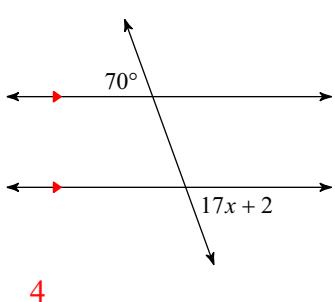
1)



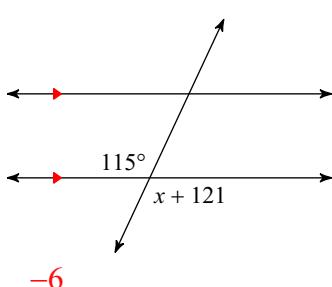
2)



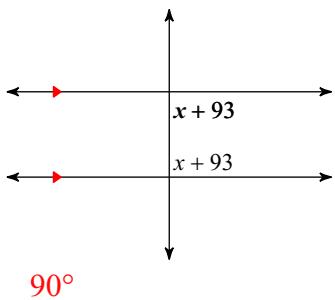
3)



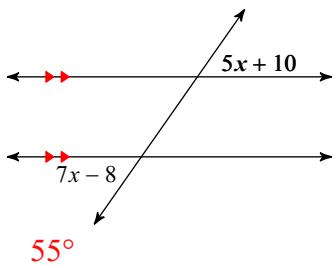
4)

**Find the measure of the angle indicated in bold.**

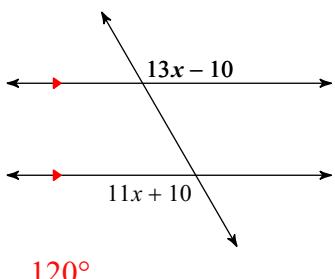
5)



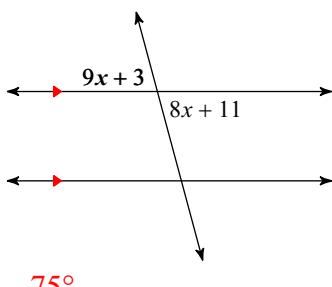
6)



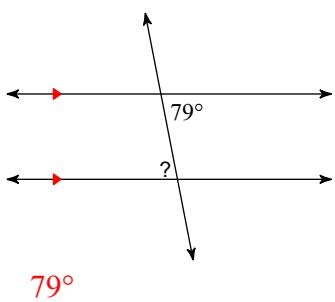
7)



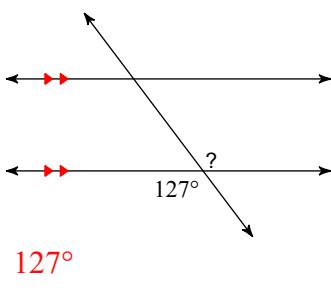
8)

**Find the measure of each angle indicated.**

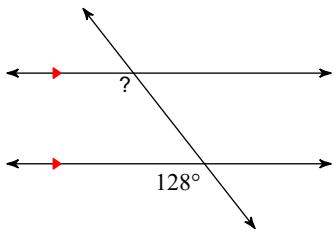
9)



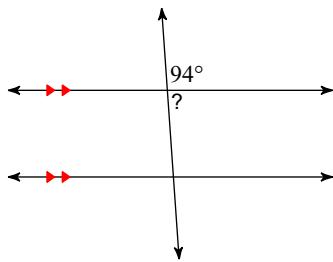
10)



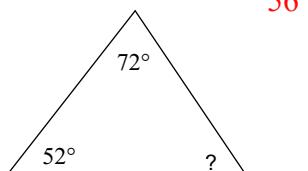
11)

 $128^\circ$ 

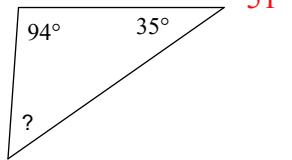
12)

 $86^\circ$ 

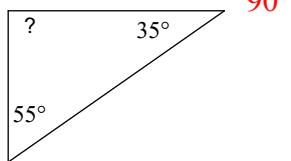
13)

 $56^\circ$ 

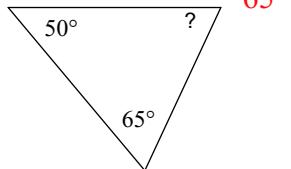
15)

 $51^\circ$ 

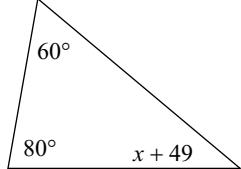
14)

 $90^\circ$ 

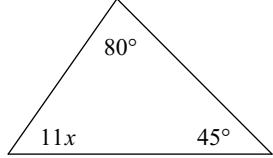
16)

 $65^\circ$ **Solve for  $x$ .**

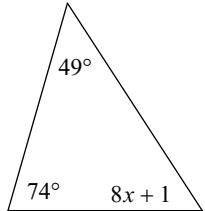
17)

 $-9$ 

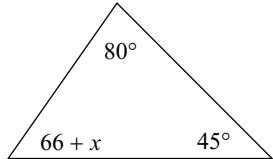
18)

 $5$ 

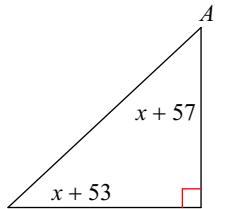
19)

 $7$ 

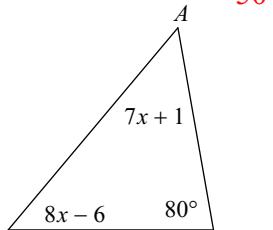
20)

 $-11$ **Find the measure of angle A.**

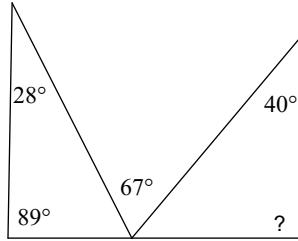
21)

 $47^\circ$ 

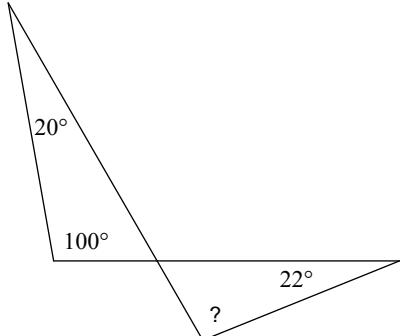
22)

 $50^\circ$ **Find the measure of each angle indicated.**

23)

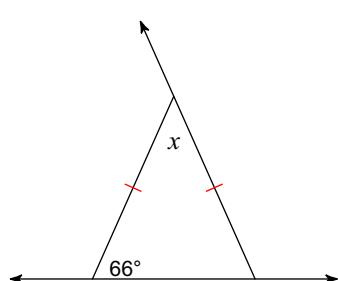
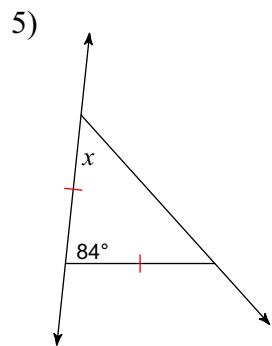
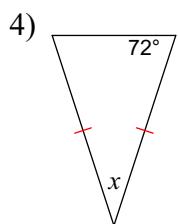
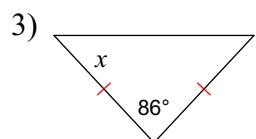
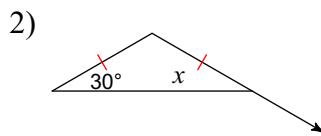
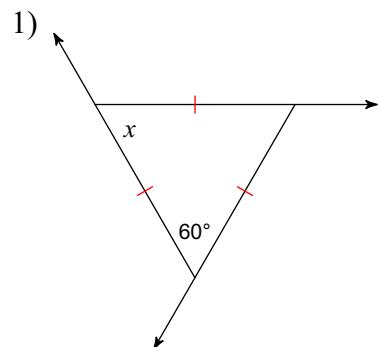
 $90^\circ$ 

24)

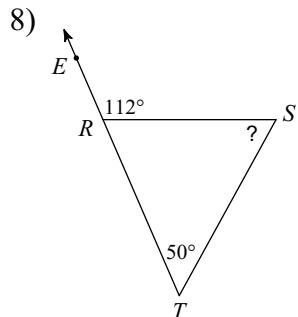
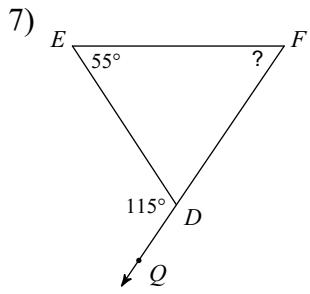
 $98^\circ$

## Packet #3 D3

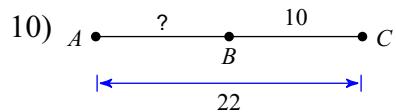
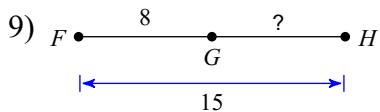
Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the value of  $x$ .**

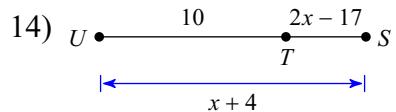
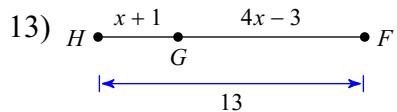
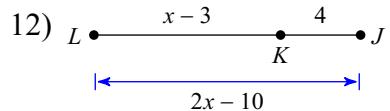
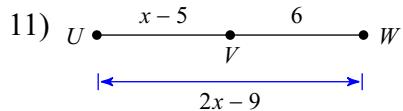
**Find the measure of each angle indicated.**



**Find the length indicated.**

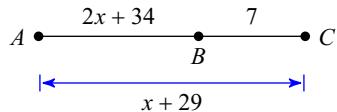


**Solve for  $x$ .**

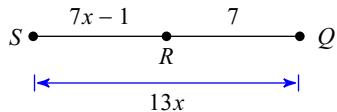


**Find the length indicated.**

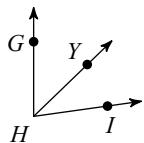
15) Find  $AC$



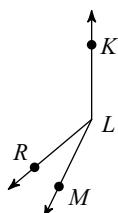
16) Find  $SQ$



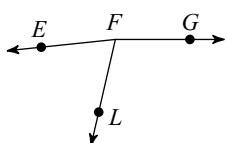
- 17)  $m\angle YHI = 36^\circ$  and  $m\angle GHI = 82^\circ$ .  
Find  $m\angle GHY$ .



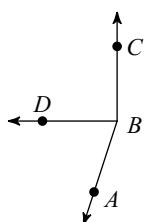
- 18) Find  $m\angle RLK$  if  $m\angle MLK = 154^\circ$  and  $m\angle MLR = 24^\circ$ .



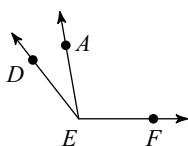
- 19) Find  $m\angle GFL$  if  $m\angle GFE = 174^\circ$  and  $m\angle LFE = 71^\circ$ .



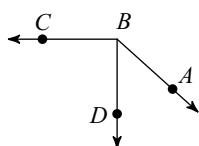
- 20) Find  $m\angle ABD$  if  $m\angle DBC = 90^\circ$  and  $m\angle ABC = 162^\circ$ .



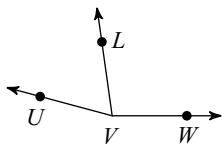
- 21) Find  $x$  if  $m\angle DEA = x + 28$ ,  $m\angle DEF = 2x + 128$ , and  $m\angle AEF = 100^\circ$ .



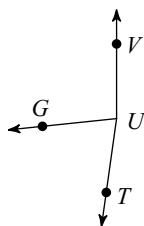
- 22)  $m\angle ABC = 138^\circ$ ,  $m\angle ABD = x + 58$ , and  $m\angle DBC = x + 100$ . Find  $x$ .



- 23) Find  $m\angle UVL$  if  $m\angle LVW = x + 109$ ,  $m\angle UVW = 165^\circ$ , and  $m\angle UVL = x + 78$ .

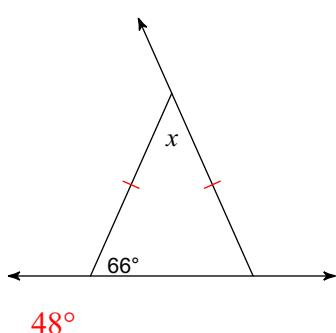
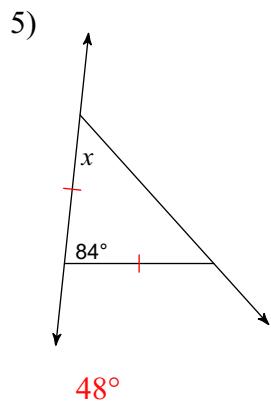
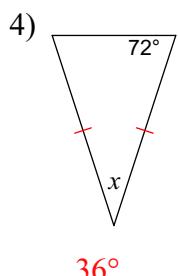
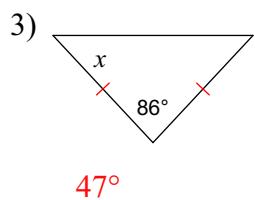
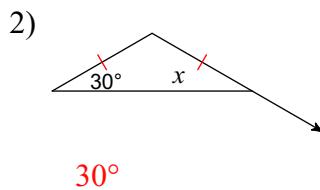
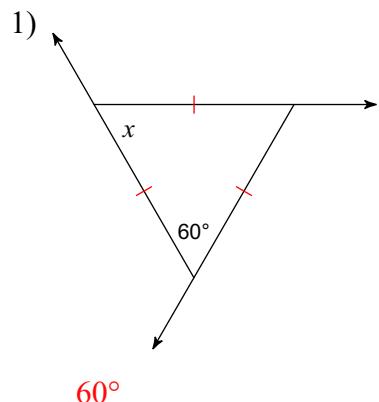


- 24) Find  $m\angle TUG$  if  $m\angle TUV = 172^\circ$ ,  $m\angle GUV = 11x + 8$ , and  $m\angle TUG = 10x - 4$ .

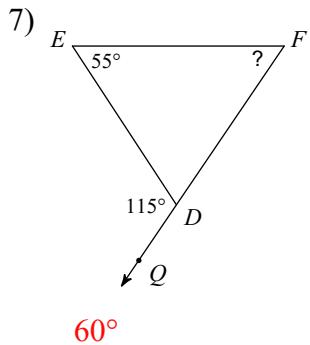


## Packet #3 D3

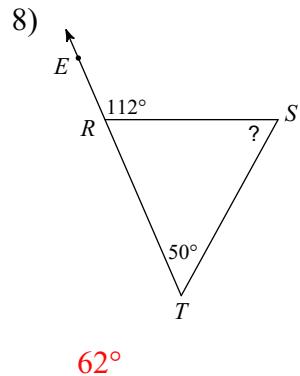
Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the value of  $x$ .**

**Find the measure of each angle indicated.**

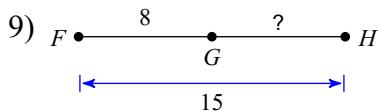


$$60^\circ$$

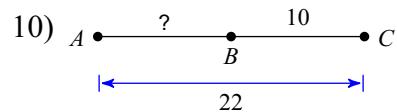


$$62^\circ$$

**Find the length indicated.**

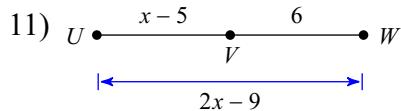


$$7$$

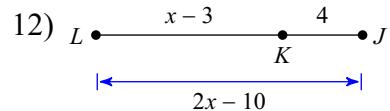


$$12$$

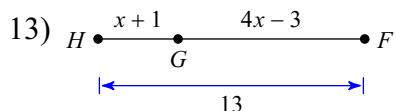
**Solve for  $x$ .**



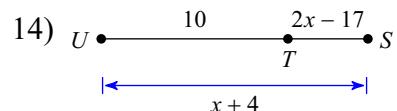
$$10$$



$$11$$



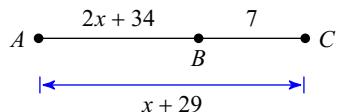
$$3$$



$$11$$

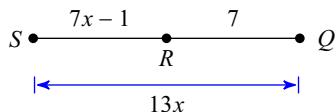
**Find the length indicated.**

15) Find  $AC$



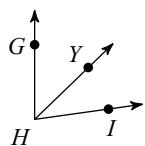
$$17$$

16) Find  $SQ$



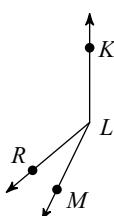
$$13$$

- 17)  $m\angle YHI = 36^\circ$  and  $m\angle GHI = 82^\circ$ .  
Find  $m\angle GHY$ .



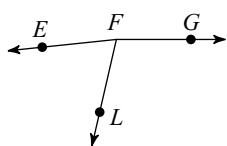
$46^\circ$

- 18) Find  $m\angle RLK$  if  $m\angle MLK = 154^\circ$  and  $m\angle MLR = 24^\circ$ .



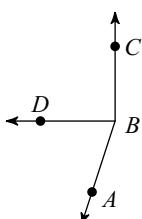
$130^\circ$

- 19) Find  $m\angle GFL$  if  $m\angle GFE = 174^\circ$  and  $m\angle LFE = 71^\circ$ .



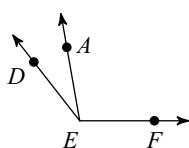
$103^\circ$

- 20) Find  $m\angle ABD$  if  $m\angle DBC = 90^\circ$  and  $m\angle ABC = 162^\circ$ .



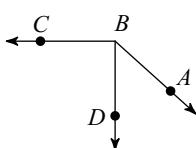
$72^\circ$

- 21) Find  $x$  if  $m\angle DEA = x + 28$ ,  $m\angle DEF = 2x + 128$ , and  $m\angle AEF = 100^\circ$ .



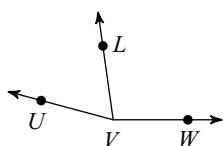
$0$

- 22)  $m\angle ABC = 138^\circ$ ,  $m\angle ABD = x + 58$ , and  $m\angle DBC = x + 100$ . Find  $x$ .



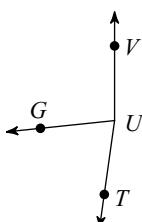
$-10$

- 23) Find  $m\angle UVL$  if  $m\angle LVW = x + 109$ ,  $m\angle UVW = 165^\circ$ , and  $m\angle UVL = x + 78$ .



$67^\circ$

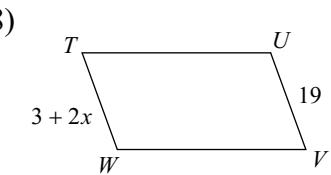
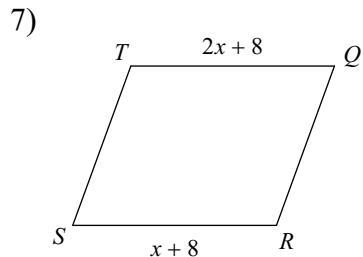
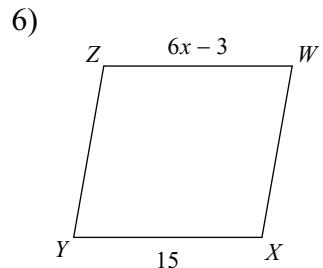
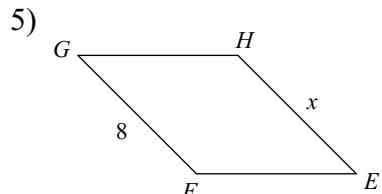
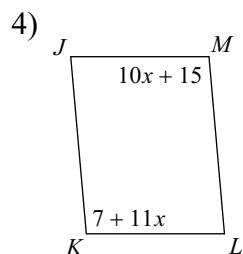
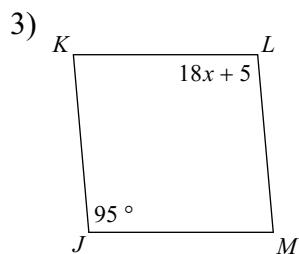
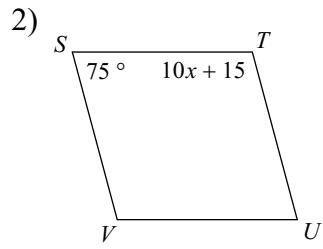
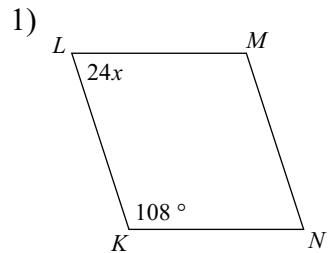
- 24) Find  $m\angle TUG$  if  $m\angle TUV = 172^\circ$ ,  $m\angle GUV = 11x + 8$ , and  $m\angle TUG = 10x - 4$ .



$76^\circ$

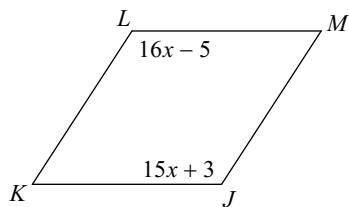
## Packet #3 D4

Date \_\_\_\_\_ Period \_\_\_\_\_

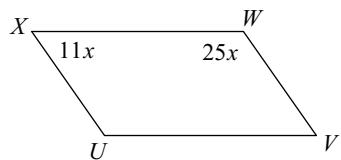
**Solve for  $x$ . Each figure is a parallelogram.**

**Find the measurement indicated in each parallelogram.**

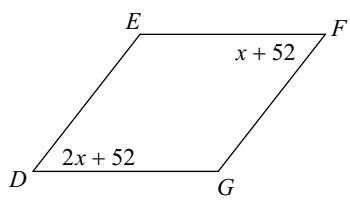
9) Find  $m\angle J$



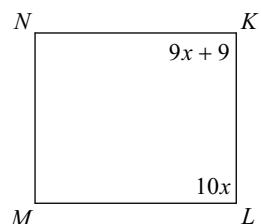
10) Find  $m\angle U$



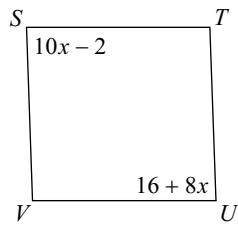
11) Find  $m\angle E$



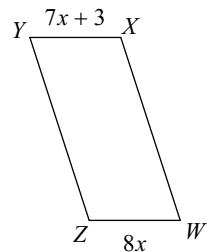
12) Find  $m\angle K$



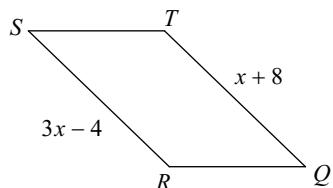
13) Find  $m\angle T$



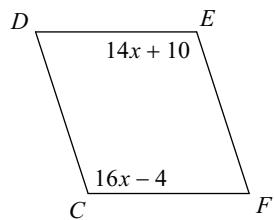
14) Find  $YX$



15) Find  $RS$

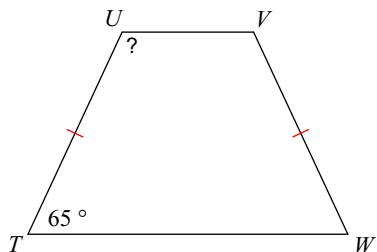


16) Find  $m\angle F$

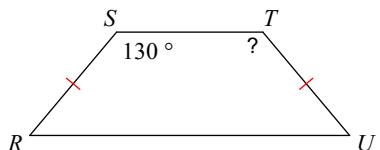


**Find the measurement of the angle indicated for each trapezoid.**

17)

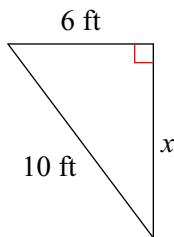


18)

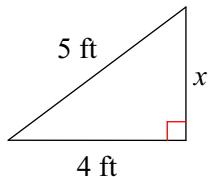


**Find the missing side of each triangle. Round your answers to the nearest tenth if necessary.**

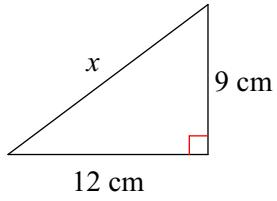
19)



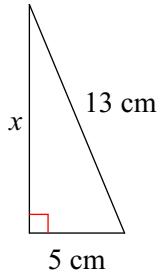
20)



21)



22)



## Answers to Packet #3 D4 (ID: 1)

- |                 |                 |                 |                |
|-----------------|-----------------|-----------------|----------------|
| 1) 3            | 2) 9            | 3) 5            | 4) 8           |
| 5) 8            | 6) 3            | 7) 0            | 8) 8           |
| 9) $123^\circ$  | 10) $125^\circ$ | 11) $128^\circ$ | 12) $90^\circ$ |
| 13) $92^\circ$  | 14) 24          | 15) 14          | 16) $72^\circ$ |
| 17) $115^\circ$ | 18) $130^\circ$ | 19) 8 ft        | 20) 3 ft       |
| 21) 15 cm       | 22) 12 cm       |                 |                |

## Packet #3 - D5

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the slope of the line through each pair of points.**

1)  $(-7, 5), (-16, -5)$

2)  $(-12, 9), (2, 18)$

3)  $(-4, -14), (-4, -20)$

4)  $(-19, 12), (12, 8)$

**Find the slope of each line.**

5)  $y = \frac{5}{4}x - 4$

6)  $y = -\frac{2}{5}x + 4$

**Find the slope of a line parallel to each given line.**

7)  $y = \frac{3}{5}x$

8)  $y = -\frac{4}{5}x - 4$

**Find the slope of a line perpendicular to each given line.**

9)  $y = -\frac{1}{2}x - 3$

10)  $y = 8x - 3$

**Find the midpoint of the line segment with the given endpoints.**

11)  $(10, 9), (6, 7)$

12)  $(-9, -7), (-8, -8)$

13)  $(0, -10), (-6, -9)$

14)  $(2, -7), (8, 0)$

**Find the other endpoint of the line segment with the given endpoint and midpoint.**

15) Endpoint:  $(10, 6)$ , midpoint:  $(-9, 7)$

16) Endpoint:  $(-8, 0)$ , midpoint:  $(8, -1)$

**Find the distance between each pair of points.**

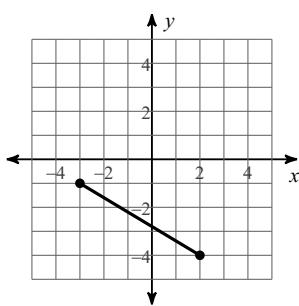
17)  $(-4, 2), (8, -8)$

18)  $(-4, -1), (-5, -6)$

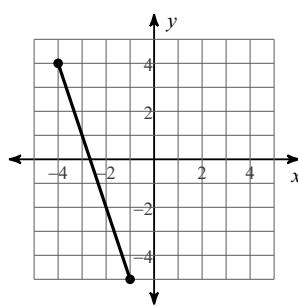
19)  $(-7, -1), (-1, 3)$

20)  $(2, -4), (-1, 4)$

21)



22)



## Answers to Packet #3 - D5 (ID: 1)

1)  $\frac{10}{9}$

5)  $\frac{5}{4}$

9) 2

13)  $\left(-3, -9\frac{1}{2}\right)$

17)  $2\sqrt{61}$

21)  $\sqrt{34}$

2)  $\frac{9}{14}$

6)  $-\frac{2}{5}$

10)  $-\frac{1}{8}$

14)  $\left(5, -3\frac{1}{2}\right)$

18)  $\sqrt{26}$

22)  $3\sqrt{10}$

3) Undefined

7)  $\frac{3}{5}$

11)  $(8, 8)$

15)  $(-28, 8)$

19)  $2\sqrt{13}$

4)  $-\frac{4}{31}$

8)  $-\frac{4}{5}$

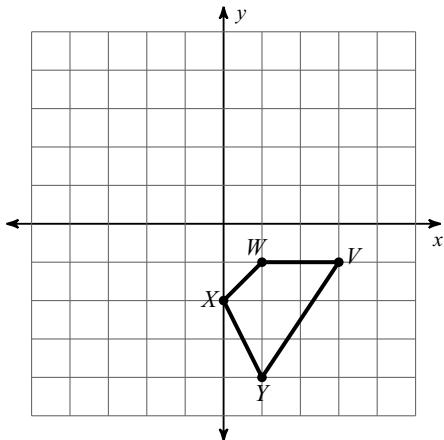
12)  $\left(-8\frac{1}{2}, -7\frac{1}{2}\right)$

16)  $(24, -2)$

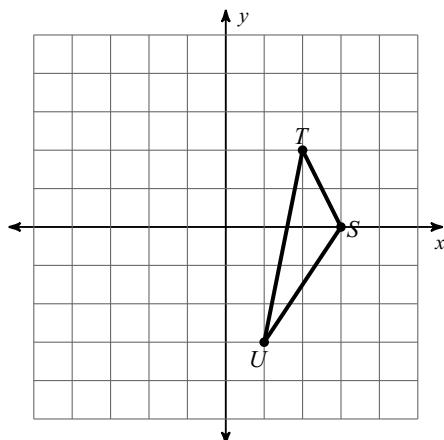
20)  $\sqrt{73}$

**Graph the image of the figure using the transformation given.**

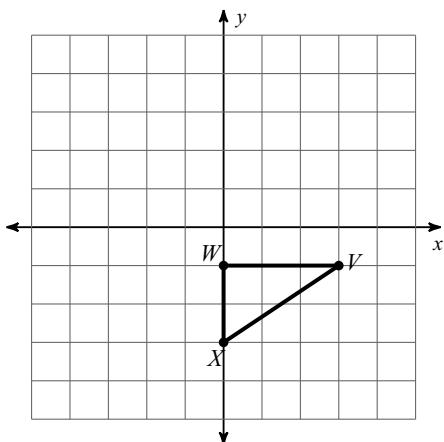
- 1) translation: 6 units up



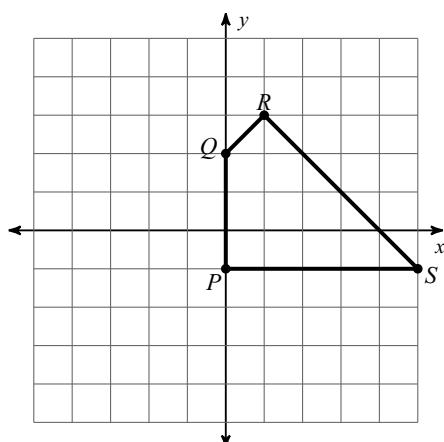
- 2) reflection across  $y = -x$



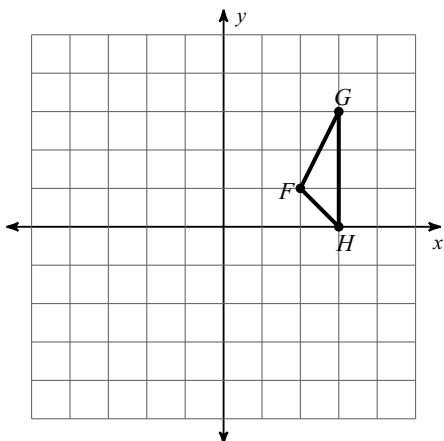
- 3) translation: 2 units right and 1 unit up



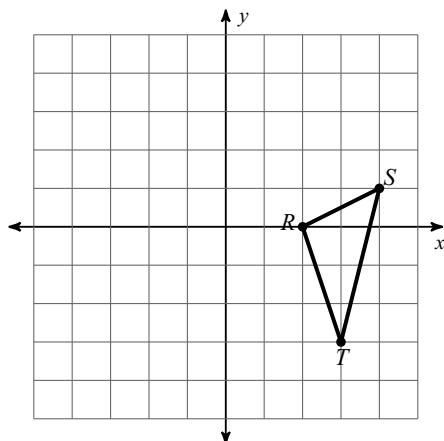
- 4) reflection across  $y = 1$



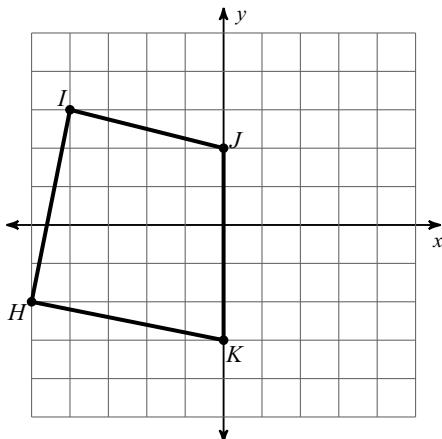
- 5) reflection across  $y = x$



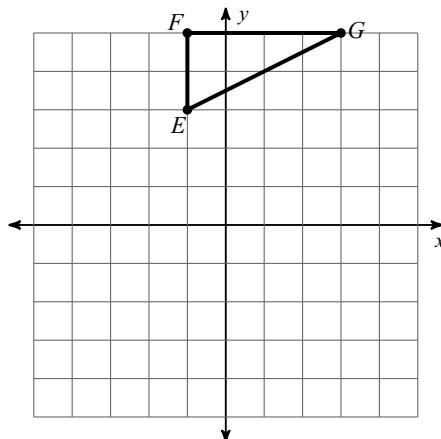
- 6) reflection across  $y = x$



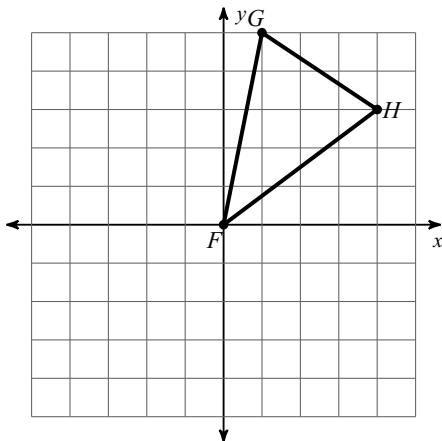
7) translation: 3 units right and 1 unit up



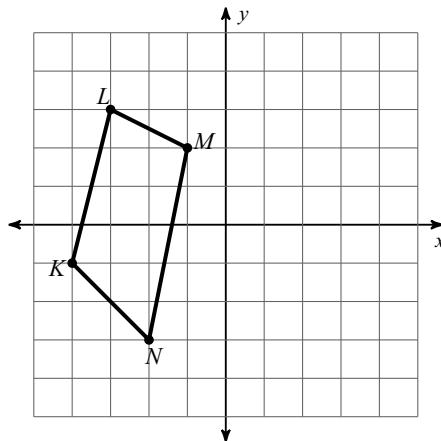
8) translation: 3 units left and 5 units down



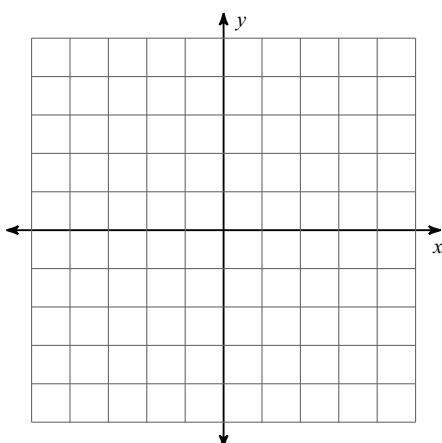
9) reflection across  $x = 2$



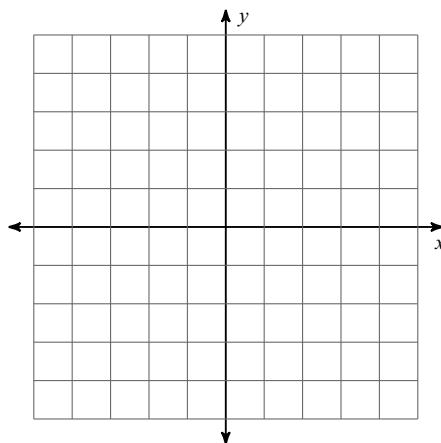
10) reflection across  $y = x$



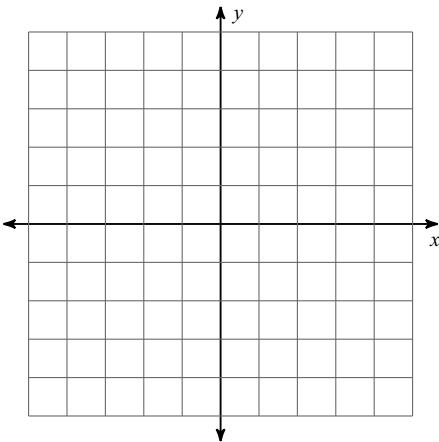
11) reflection across  $y = 1$   
 $F(1, 5)$ ,  $G(3, 5)$ ,  $H(3, 2)$



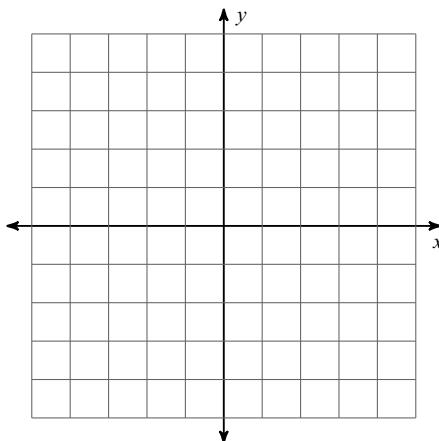
12) translation: 3 units right and 5 units down  
 $H(-3, 1)$ ,  $I(-3, 5)$ ,  $J(2, 3)$



- 13) translation: 1 unit down  
 $Q(-2, -3), R(-4, 0), S(0, 3), T(3, -2)$

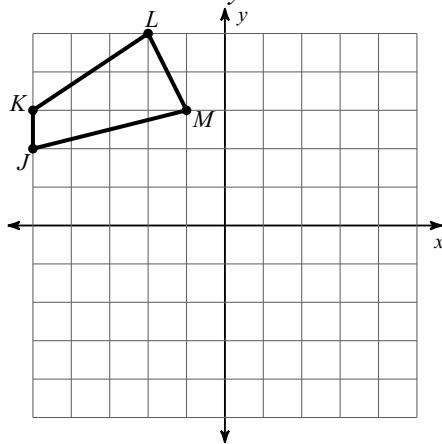


- 14) reflection across  $x = -2$   
 $A(-5, -4), B(-5, -3), C(-3, -1), D(-1, -5)$

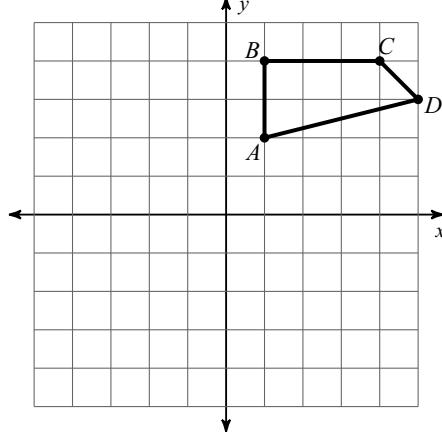


Find the coordinates of the vertices of each figure after the given transformation.

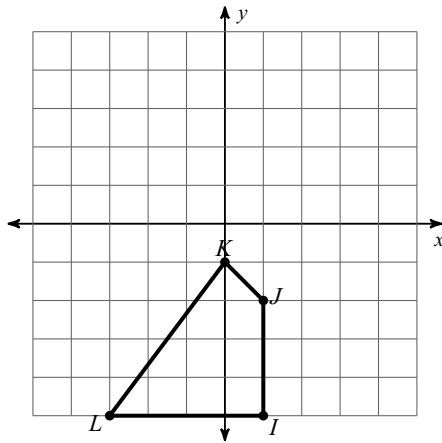
- 15) reflection across  $y = 3$



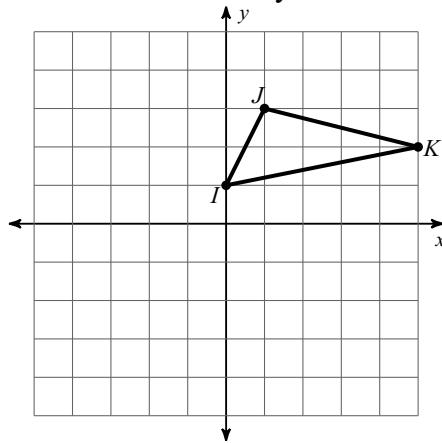
- 16) translation: 7 units down



- 17) reflection across the x-axis

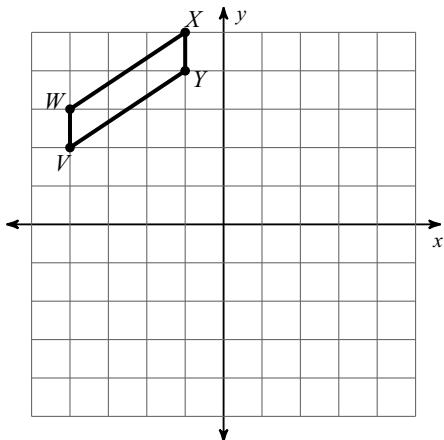


- 18) reflection across the y-axis

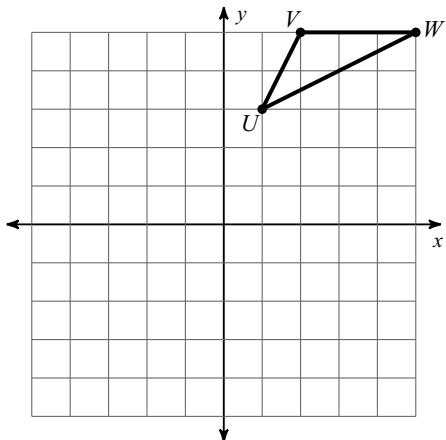


**Graph the image of the figure using the transformation given.**

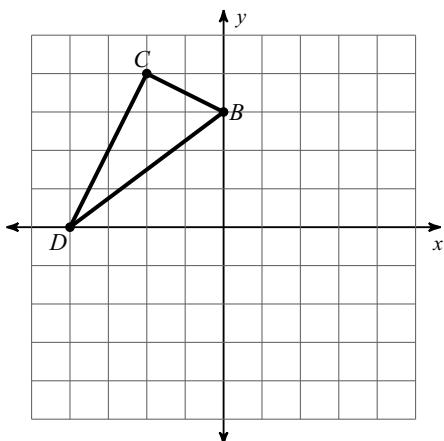
- 19) reflection across  $y = 1$



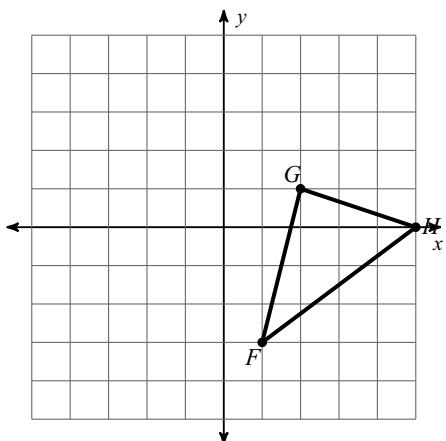
- 20) reflection across  $y = 1$



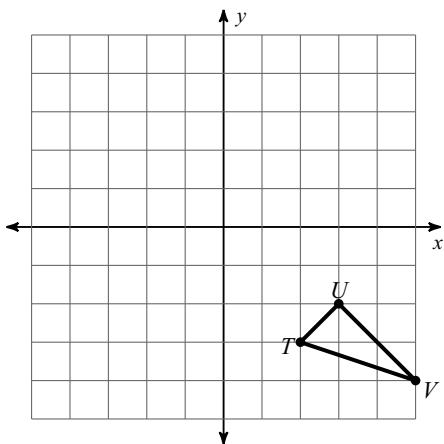
- 21) reflection across  $x = -2$



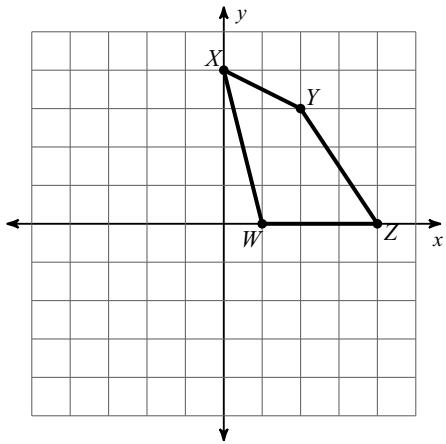
- 22) reflection across  $x = 3$



- 23) reflection across  $x = 2$

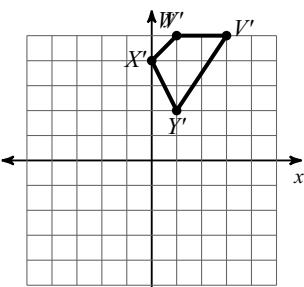


- 24) reflection across the x-axis

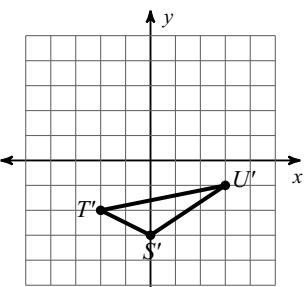


# Answers to Packet #3 D6 (ID: 1)

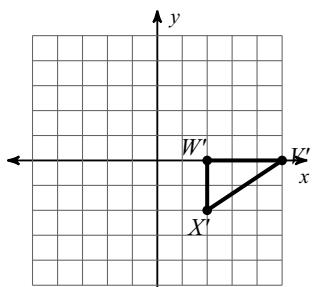
1)



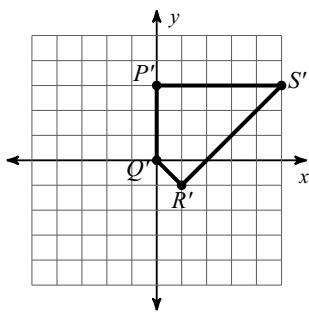
2)



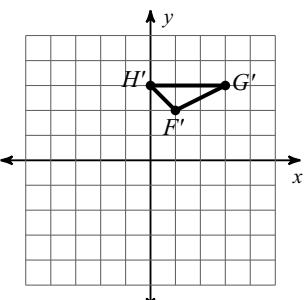
3)



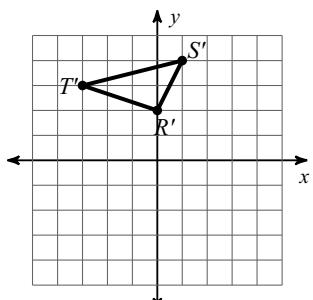
4)



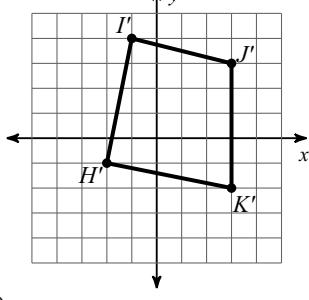
5)



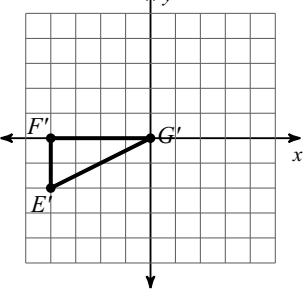
6)



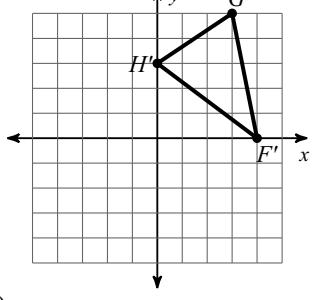
7)



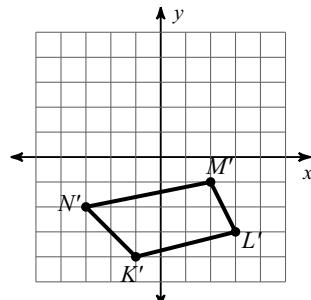
8)



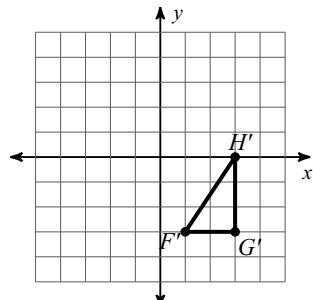
9)



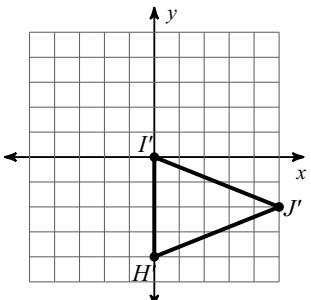
10)



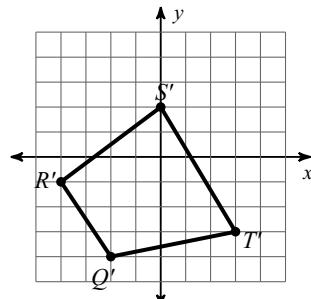
11)



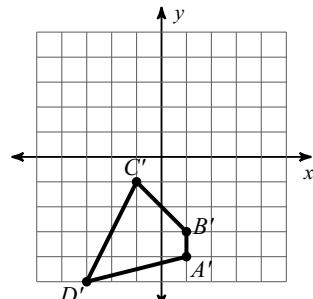
12)



13)



14)



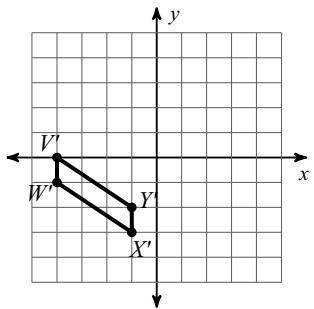
15)  $K'(-5, 3), L'(-2, 1), M'(-1, 3), J'(-5, 4)$

17)  $K'(0, 1), J'(1, 2), I'(1, 5), L'(-3, 5)$

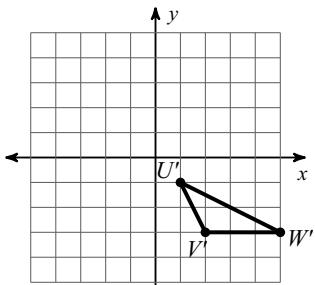
16)  $A'(1, -5), B'(1, -3), C'(4, -3), D'(5, -4)$

18)  $J'(-1, 3), K'(-5, 2), I'(0, 1)$

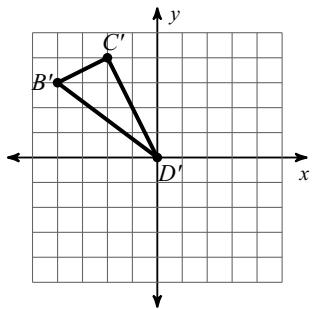
19)



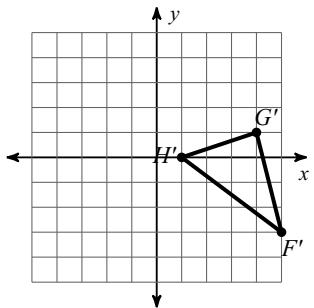
20)



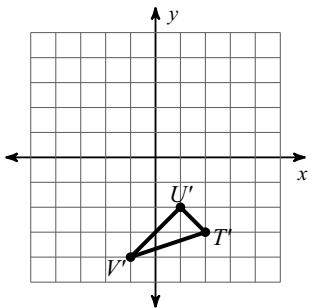
21)



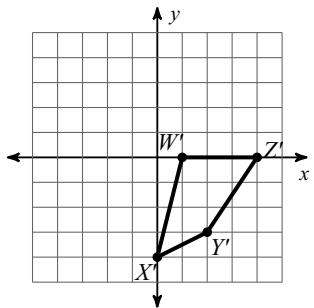
22)



23)



24)

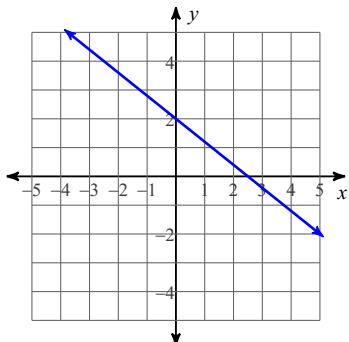


## Packet #3 D7

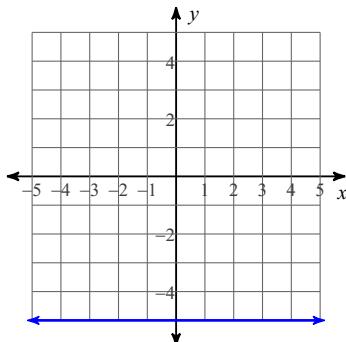
Date \_\_\_\_\_ Period \_\_\_\_\_

**Write the slope-intercept form of the equation of each line.**

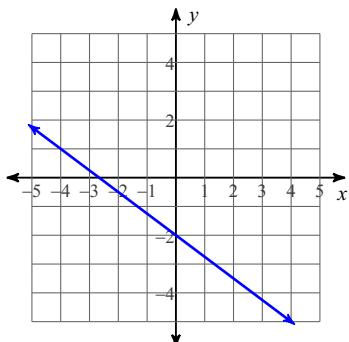
1)



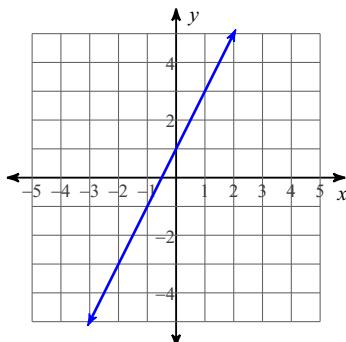
2)



3)



4)

**Write the slope-intercept form of the equation of each line given the slope and y-intercept.**

5) Slope = 1, y-intercept = -2

6) Slope =  $-\frac{5}{3}$ , y-intercept = 0

7) Slope = -2, y-intercept = 3

8) Slope = 0, y-intercept = 0

**Write the slope-intercept form of the equation of the line through the given point with the given slope.**

9) through:  $(4, -5)$ , slope =  $-\frac{7}{4}$

10) through:  $(3, -4)$ , slope =  $-\frac{9}{4}$

11) through:  $(2, 5)$ , slope = 3

12) through:  $(-5, -2)$ , slope =  $-\frac{2}{5}$

**Write the slope-intercept form of the equation of the line through the given points.**

13) through:  $(4, -2)$  and  $(0, -4)$

14) through:  $(2, -5)$  and  $(-1, -5)$

15) through:  $(-2, 1)$  and  $(-5, 3)$

16) through:  $(3, 3)$  and  $(-3, -1)$

**Write the slope-intercept form of the equation of the line described.**

17) through:  $(1, 3)$ , parallel to  $y = 6x + 4$

18) through:  $(-2, 3)$ , parallel to  $y = -\frac{5}{2}x + 4$

19) through:  $(4, -5)$ , parallel to  $y = -\frac{1}{2}x + 1$

20) through:  $(-1, 1)$ , parallel to  $y = 4x - 5$

21) through:  $(2, -5)$ , perp. to  $y = \frac{1}{2}x - 4$

22) through:  $(3, -2)$ , perp. to  $y = -3x + 4$

23) through:  $(-3, 3)$ , perp. to  $y = \frac{2}{3}x + 4$

24) through:  $(4, 2)$ , perp. to  $y = -\frac{2}{3}x - 2$

## Answers to Packet #3 D7 (ID: 1)

1)  $y = -\frac{4}{5}x + 2$

5)  $y = x - 2$

9)  $y = -\frac{7}{4}x + 2$

13)  $y = \frac{1}{2}x - 4$

17)  $y = 6x - 3$

21)  $y = -2x - 1$

2)  $y = -5$

6)  $y = -\frac{5}{3}x$

10)  $y = -\frac{9}{4}x + \frac{11}{4}$

14)  $y = -5$

18)  $y = -\frac{5}{2}x - 2$

22)  $y = \frac{1}{3}x - 3$

3)  $y = -\frac{3}{4}x - 2$

7)  $y = -2x + 3$

11)  $y = 3x - 1$

15)  $y = -\frac{2}{3}x - \frac{1}{3}$

19)  $y = -\frac{1}{2}x - 3$

23)  $y = -\frac{3}{2}x - \frac{3}{2}$

4)  $y = 2x + 1$

8)  $y = 0$

12)  $y = -\frac{2}{5}x - 4$

16)  $y = \frac{2}{3}x + 1$

20)  $y = 4x + 5$

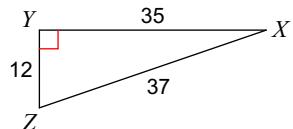
24)  $y = \frac{3}{2}x - 4$

## Packet #3 D8

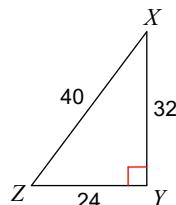
Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the value of each trigonometric ratio. Just write the fraction using SOH-CAH-TOA**

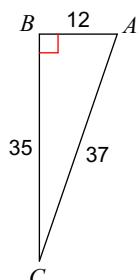
1)  $\tan Z$



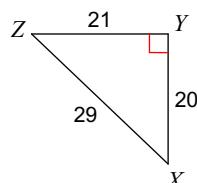
2)  $\sin Z$



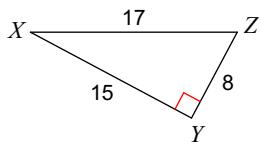
3)  $\cos C$



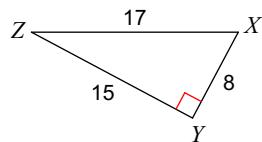
4)  $\sin Z$



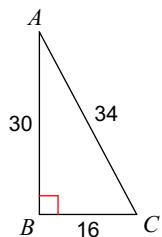
5)  $\sin X$



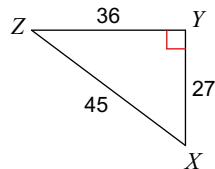
6)  $\sin X$



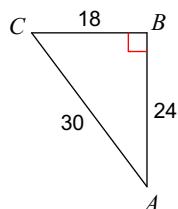
7)  $\sin A$



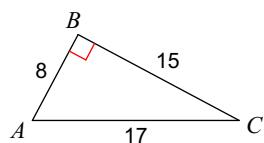
8)  $\tan Z$



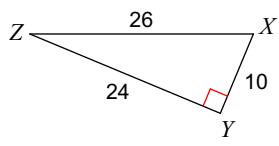
9)  $\tan C$



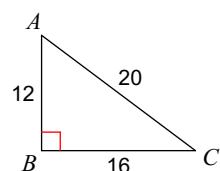
10)  $\tan A$



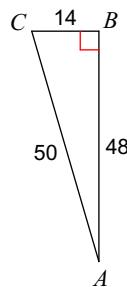
11)  $\sin Z$



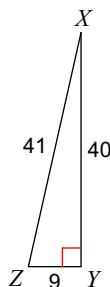
12)  $\cos C$



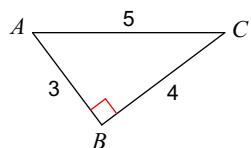
13)  $\sin A$



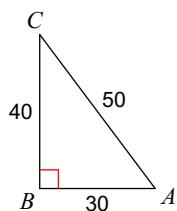
14)  $\sin X$



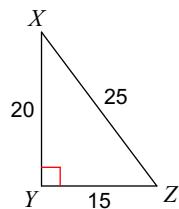
15)  $\cos C$



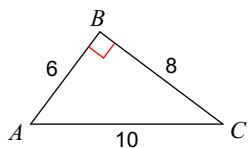
16)  $\cos C$



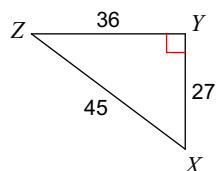
17)  $\tan Z$



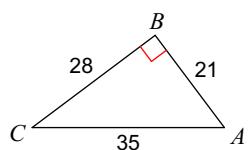
18)  $\cos A$



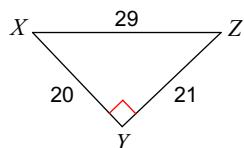
19)  $\sin Z$



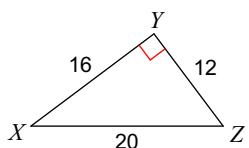
20)  $\tan C$



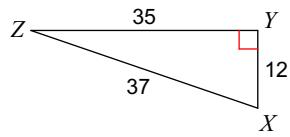
21)  $\sin X$



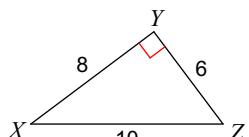
22)  $\sin Z$



23)  $\sin Z$



24)  $\sin X$



## Answers to Packet #3 D8 (ID: 1)

1)  $\frac{35}{12}$

2)  $\frac{4}{5}$

3)  $\frac{35}{37}$

4)  $\frac{20}{29}$

5)  $\frac{8}{17}$

6)  $\frac{15}{17}$

7)  $\frac{8}{17}$

8)  $\frac{3}{4}$

9)  $\frac{4}{3}$

10)  $\frac{15}{8}$

11)  $\frac{5}{13}$

12)  $\frac{4}{5}$

13)  $\frac{7}{25}$

14)  $\frac{9}{41}$

15)  $\frac{4}{5}$

16)  $\frac{4}{5}$

17)  $\frac{4}{3}$

18)  $\frac{3}{5}$

19)  $\frac{3}{5}$

20)  $\frac{3}{4}$

21)  $\frac{21}{29}$

22)  $\frac{4}{5}$

23)  $\frac{12}{37}$

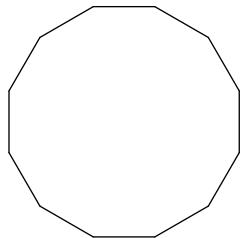
24)  $\frac{3}{5}$

## Packet #3 D9

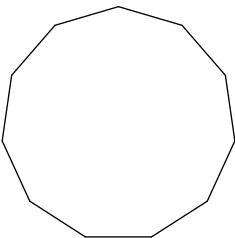
Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the interior angle sum for each polygon. Round your answer to the nearest tenth if necessary.**

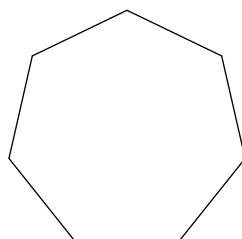
1)



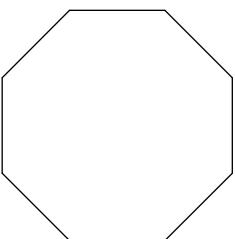
2)



3)

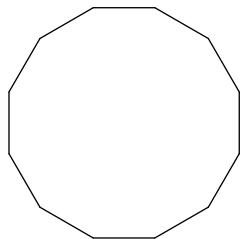


4)

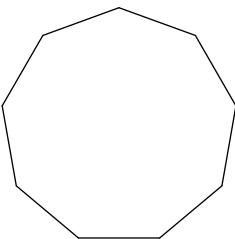


**Find the measure of one interior angle in each regular polygon. Round your answer to the nearest tenth if necessary.**

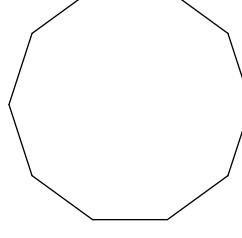
5)



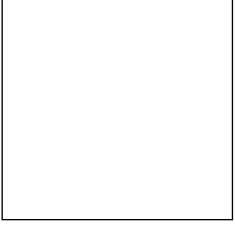
6)



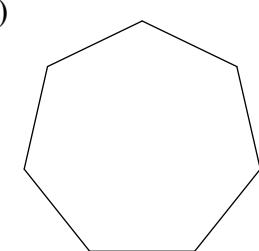
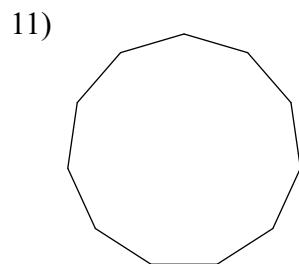
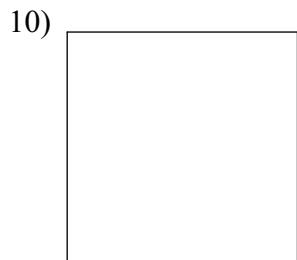
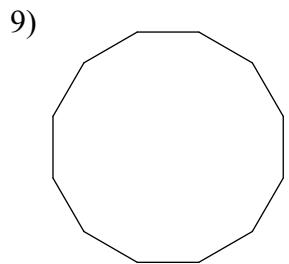
7)



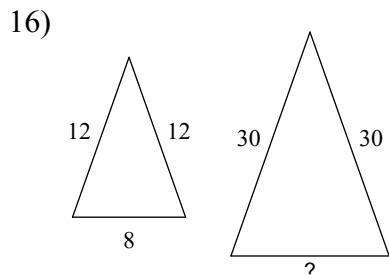
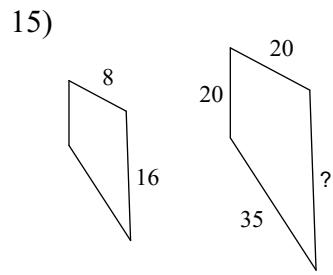
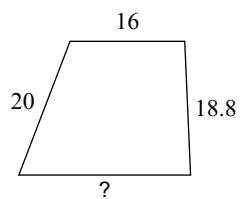
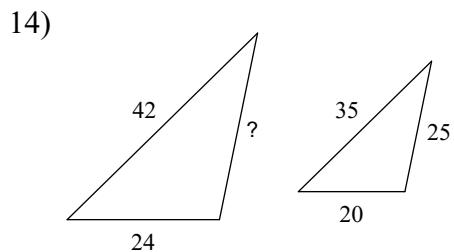
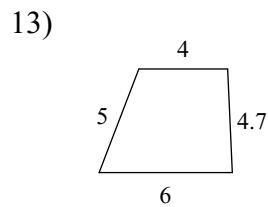
8)



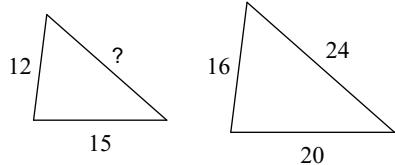
**Find the measure of one exterior angle in each regular polygon. Round your answer to the nearest tenth if necessary.**



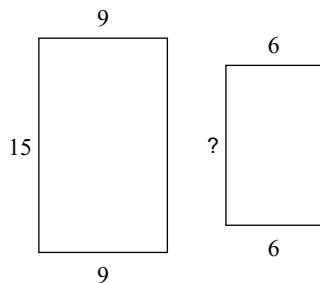
**The polygons in each pair are similar. Find the missing side length.**



17)

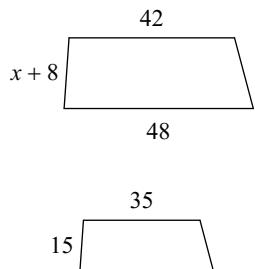


18)

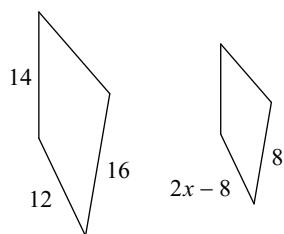


Solve for  $x$ . The polygons in each pair are similar.

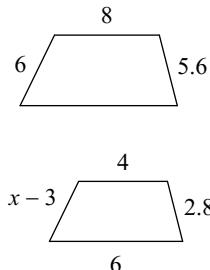
19)



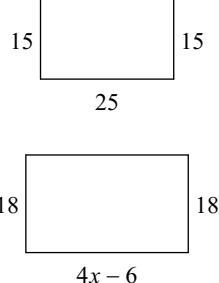
20)



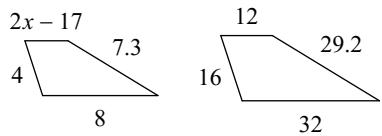
21)



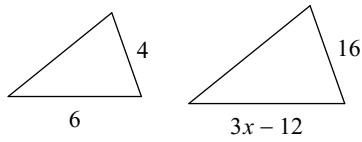
22)



23)



24)



## Answers to Packet #3 D9 (ID: 1)

- |                 |                 |                  |                  |
|-----------------|-----------------|------------------|------------------|
| 1) $1800^\circ$ | 2) $1620^\circ$ | 3) $900^\circ$   | 4) $1080^\circ$  |
| 5) $150^\circ$  | 6) $140^\circ$  | 7) $144^\circ$   | 8) $90^\circ$    |
| 9) $30^\circ$   | 10) $90^\circ$  | 11) $32.7^\circ$ | 12) $51.4^\circ$ |
| 13) 24          | 14) 30          | 15) 40           | 16) 20           |
| 17) 18          | 18) 10          | 19) 10           | 20) 7            |
| 21) 6           | 22) 9           | 23) 10           | 24) 12           |

## Packet #3 D10

Date \_\_\_\_\_ Period \_\_\_\_\_

**State if the three numbers can be the measures of the sides of a triangle.**

1) 7, 15, 12

2) 12, 22, 9

3) 6, 9, 7

4) 21, 12, 8

5) 7, 7, 4

6) 9, 6, 12

**Solve each proportion.**

7)  $\frac{x - 10}{9} = \frac{x}{5}$

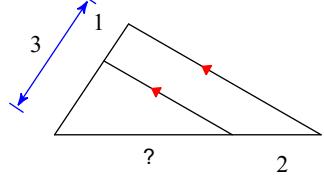
8)  $\frac{m + 1}{10} = \frac{m}{8}$

9)  $\frac{x}{4} = \frac{x + 9}{3}$

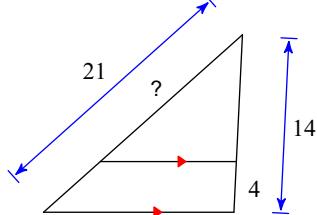
10)  $\frac{k}{2} = \frac{k + 3}{7}$

**Find the missing length indicated.**

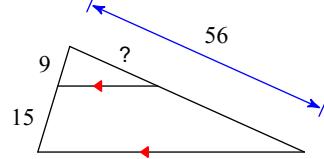
11)



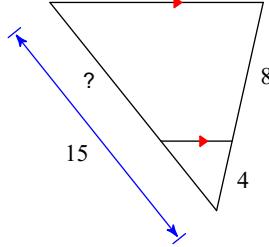
12)



13)

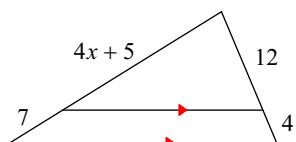


14)

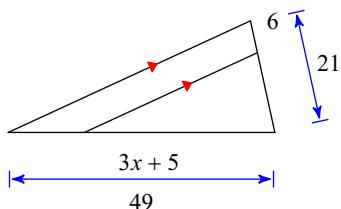


**Solve for  $x$ .**

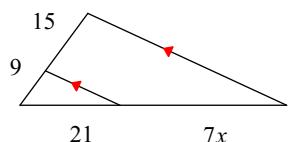
15)



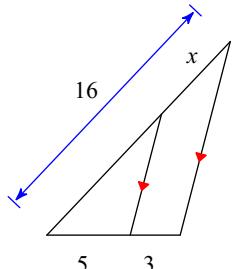
16)



17)

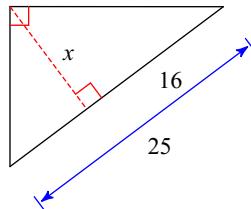


18)

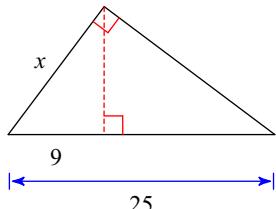


**Find the missing length indicated.**

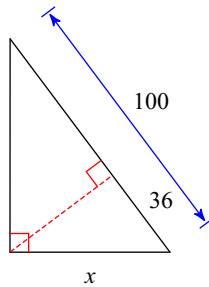
19)



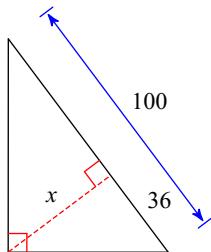
20)



21)



22)



## Answers to Packet #3 D10 (ID: 1)

- |              |               |                |            |
|--------------|---------------|----------------|------------|
| 1) Yes       | 2) No         | 3) Yes         | 4) No      |
| 5) Yes       | 6) Yes        | 7) $\{-12.5\}$ | 8) $\{4\}$ |
| 9) $\{-36\}$ | 10) $\{1.2\}$ | 11) 4          | 12) 15     |
| 13) 21       | 14) 10        | 15) 4          | 16) 10     |
| 17) 5        | 18) 6         | 19) 12         | 20) 15     |
| 21) 60       | 22) 48        |                |            |