

## Trimester Review

**Solve each equation.**

1)  $-24 + 5n = 8(n - 5) + n$

2)  $6(6 - 6k) = -k + 36$

3)  $7x + 17 = 3(x - 5)$

**Solve the system of equations. Your answer should be a coordinate (x, y).**

4)  $y = 6 - x$   
 $-3x + y = 2$

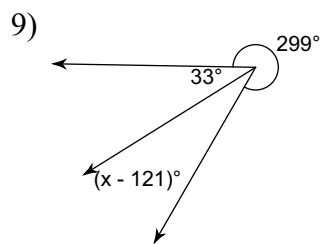
5)  $6x + 6y = 0$   
 $y = -6x$

6)  $6x - 8y = 22$   
 $y = -6x - 23$

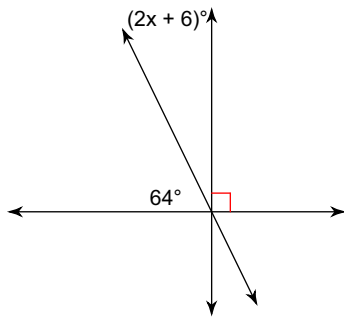
7)  $2x - 2y = -18$   
 $y = -7x - 15$

8)  $y = 6x - 22$   
 $-5x + 5y = -10$

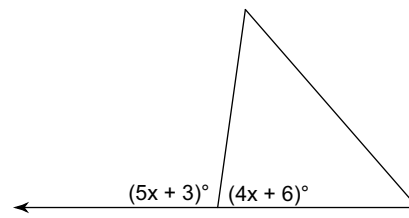
**Find the value of x. Name any angle relationships that were used.**



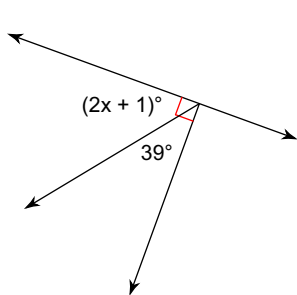
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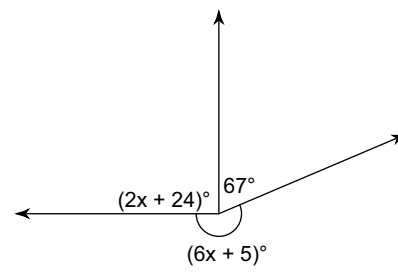
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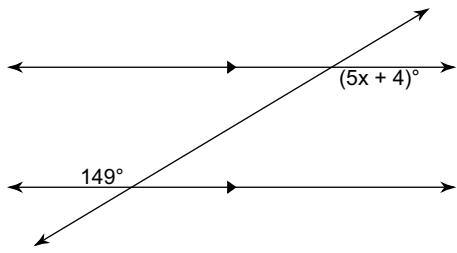
12)



13)

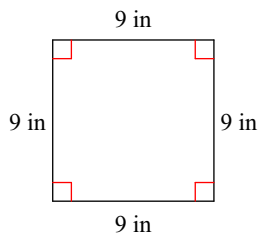


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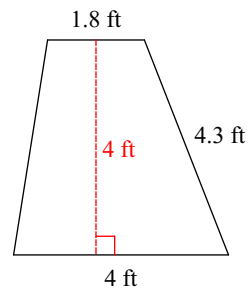


**Find the area of each.**

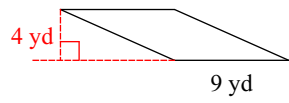
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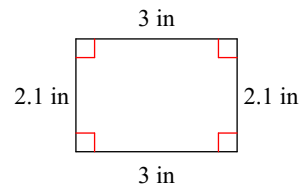
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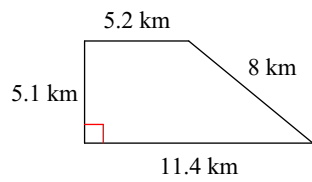
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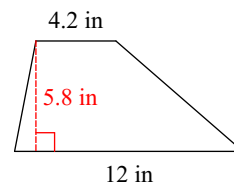
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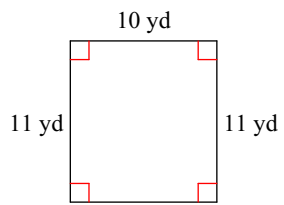
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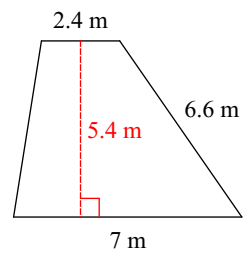
20)



21)

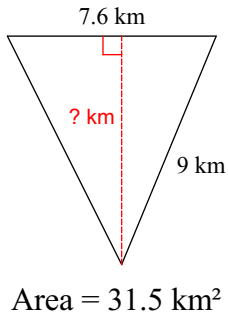


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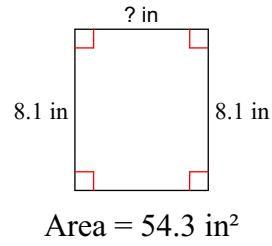


Find the missing measurement. Round your answer to the nearest tenth.

23)

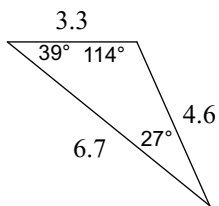


24)

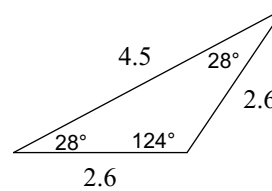


Classify each triangle by its angles and sides.

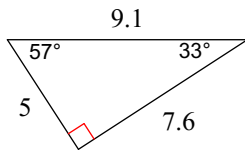
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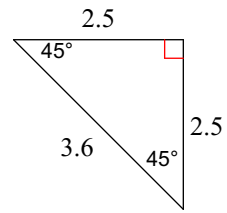
26)



27)



28)



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

29)  $y = x$

30)  $y = -3x - 2$

31)  $y = -x - 2$



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

32) Slope =  $\frac{3}{4}$ , y-intercept = 3

33) Slope =  $-\frac{1}{3}$ , y-intercept = -4

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

34) through: (4, 3), parallel to  $y = -\frac{1}{4}x + 3$

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

**Solve each proportion.**

$$36) \frac{5}{12} = \frac{b}{3}$$

$$37) -\frac{7}{4} = \frac{p}{8}$$

$$38) \frac{11}{2} = \frac{6}{9x}$$

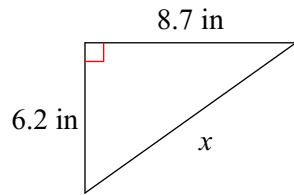
$$39) \frac{12}{x+5} = \frac{3}{x-3}$$

$$40) \frac{2}{10} = \frac{x+5}{x-5}$$

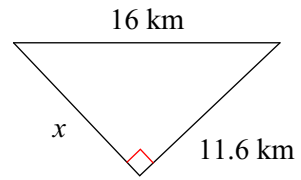
$$41) \frac{x+12}{4} = \frac{x-7}{11}$$

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

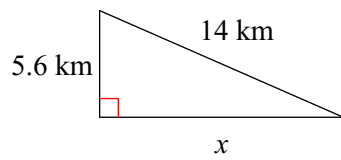
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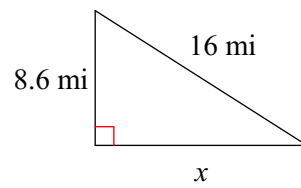
43)



44)

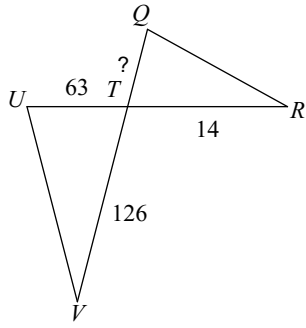


45)

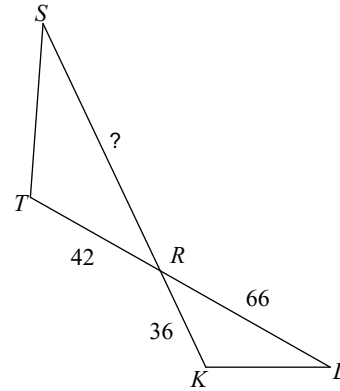


Find the missing length. The triangles in each pair are similar.

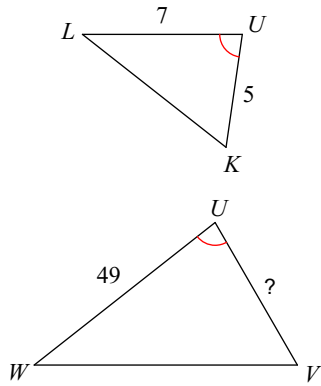
46)



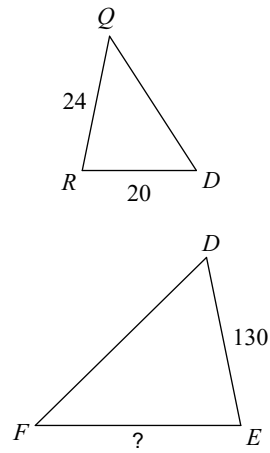
47)



48)

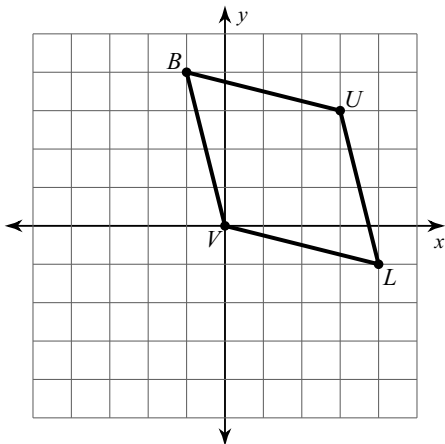


49)

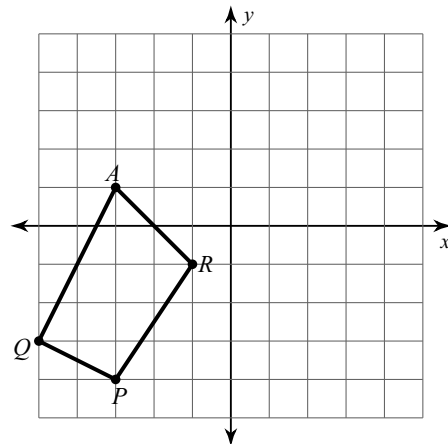


**Graph the image of the figure using the transformation given.**

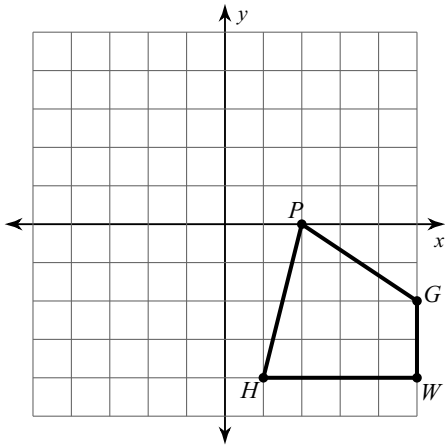
50) rotation  $180^\circ$  about the origin



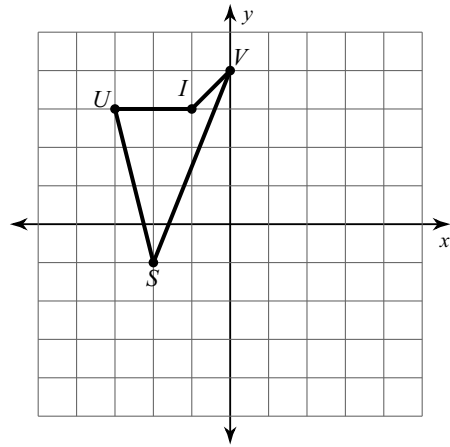
51) translation: 5 units right



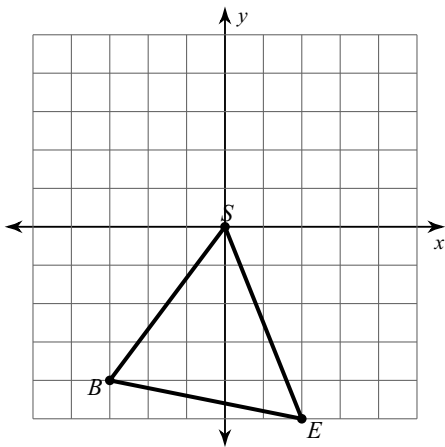
52) rotation  $90^\circ$  clockwise about the origin



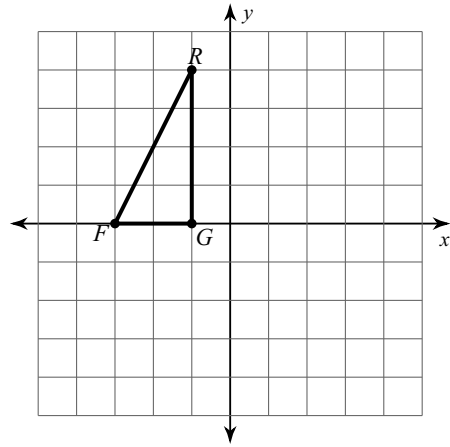
53) rotation  $90^\circ$  clockwise about the origin



54) reflection across  $x = 1$



55) rotation  $180^\circ$  about the origin



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

56) 6, 7, 10

57) 7, 15, 8

58) 3, 10, 7

Two sides of a triangle have the following measures. Find the range of possible measures for the third side.

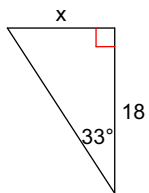
59) 8, 12

60) 11, 7

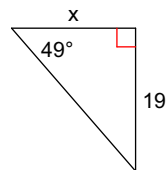
61) 7, 7

Find the missing side. Round to the nearest tenth.

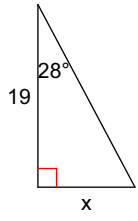
62)



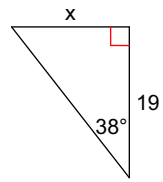
63)



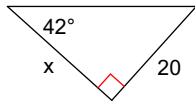
64)



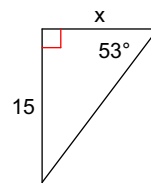
65)



66)



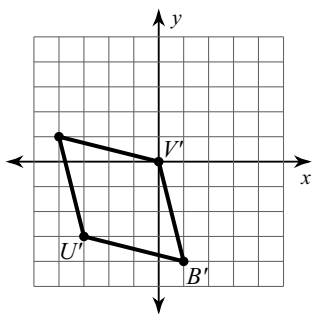
67)



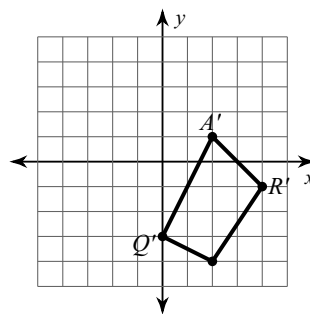


## Answers to Trimester Review

- |                             |                             |                             |                            |
|-----------------------------|-----------------------------|-----------------------------|----------------------------|
| 1) {4}                      | 2) {0}                      | 3) {-8}                     | 4) (1,5)                   |
| 5) (0,0)                    | 6) (-3,-5)                  | 7) (-3,6)                   | 8) (4,2)                   |
| 9) 149                      | 10) 10                      | 11) 19                      | 12) 25                     |
| 13) 33                      | 14) 29                      | 15) 81 in <sup>2</sup>      | 16) 11.6 ft <sup>2</sup>   |
| 17) 36 yd <sup>2</sup>      | 18) 6.3 in <sup>2</sup>     | 19) 42.33 km <sup>2</sup>   | 20) 46.98 in <sup>2</sup>  |
| 21) 110 yd <sup>2</sup>     | 22) 25.38 m <sup>2</sup>    | 23) 8.3 km                  | 24) 6.7 in                 |
| 25) obtuse scalene          | 26) obtuse isosceles        | 27) right scalene           | 28) right isosceles        |
| 29) -1                      | 30) $\frac{1}{3}$           | 31) 1                       | 32) $y = \frac{3}{4}x + 3$ |
| 33) $y = -\frac{1}{3}x - 4$ | 34) $y = -\frac{1}{4}x + 4$ | 35) $y = -\frac{1}{4}x + 3$ | 36) {1.25}                 |
| 37) {-14}                   | 38) {0.12}                  | 39) {5.66}                  | 40) {-7.5}                 |
| 41) {-22.85}                | 42) 10.7 in                 | 43) 11 km                   | 44) 12.8 km                |
| 45) 13.5 mi                 | 46) 7                       | 47) 77                      | 48) 35                     |
| 49) 156                     | 50)                         | 51)                         |                            |

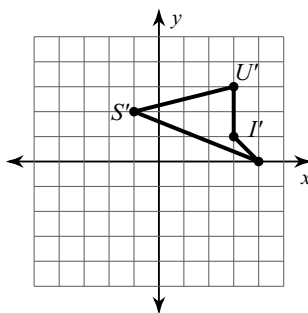
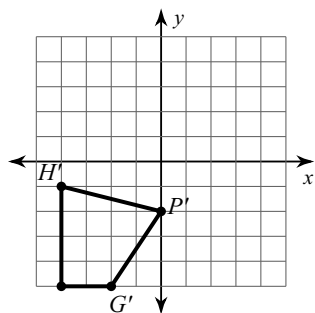


53)



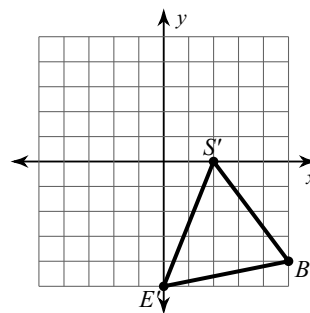
54)

52)

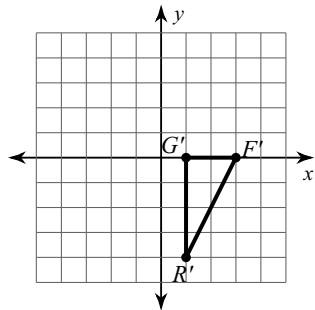


56) Yes

57) No



55)



58) No

59)  $4 < x < 20$

60)  $4 < x < 18$

61)  $0 < x < 14$

62) 11.7

63) 16.5

64) 10.1

65) 14.8

66) 22.2

67) 11.3