

Summer Review Work

Date _____

State if each pair of ratios forms a proportion.

1) $\frac{4}{6}$ and $\frac{2}{3}$

2) $\frac{8}{24}$ and $\frac{2}{4}$

3) $\frac{4}{2}$ and $\frac{12}{10}$

4) $\frac{12}{4}$ and $\frac{3}{2}$

Solve each proportion.

5) $\frac{m}{4} = \frac{7}{10}$

6) $\frac{8}{k} = \frac{3}{7}$

$$7) \frac{6}{10} = \frac{n}{4}$$

$$8) \frac{9}{6} = \frac{n}{8}$$

Answer each question and round your answer to the nearest whole number.

9) The currency in the United Arab Emirates is the Dirham. The exchange rate is approximately 4 Dirhams = \$1. At this rate, how many dollars would you get if you exchanged 16 Dirhams?

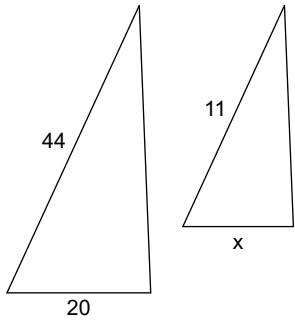
10) If you can buy one jar of crushed ginger for \$2, then how many can you buy with \$4?

11) Abhasra was planning a trip to Western Samoa. Before going, she did some research and learned that the exchange rate is 3 Tala to \$1. How many Tala would she get if she exchanged \$4?

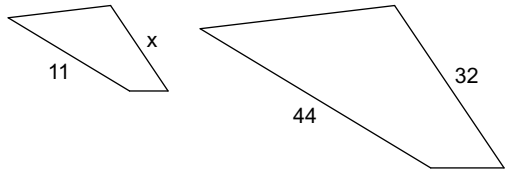
12) A painting is 4 in tall and 1 in wide. If it is enlarged to a width of 4 in, then how tall will it be?

Each pair of figures is similar. Find the missing side.

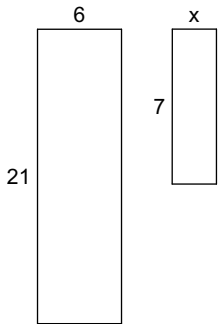
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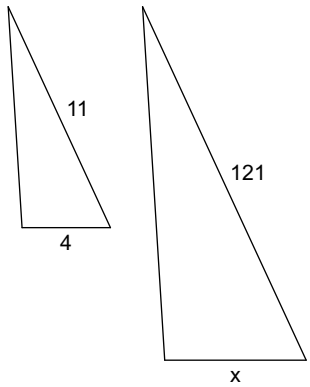
14)



15)



16)



Answer each question and round your answer to the nearest whole number.

17) If a 7 ft tall car casts a 2 ft long shadow, then how long is the shadow that a 14 ft tall adult giraffe casts?

18) A map has a scale of 1 in : 18 mi. If Sun Valley and Abbots Rise are 6 in apart on the map, then how far apart are the real cities?

19) A model house is 7 cm wide. If it was built with a scale of 1 cm : 3 m, then how wide is the real house?

20) A 4 ft tall car standing next to a woman casts a 6 ft shadow. If the woman is 6 ft tall, then how long is her shadow?

Write each as a percent. Use repeating decimals when necessary.

21) $\frac{1}{2}$

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

23) 0.7

24) 0.0054

Solve each problem.

25) 84% of what is 3?

26) 74% of what is 151?

27) What percent of 126 is 105?

28) What is 109% of 147.6?

Find each percent change. Round to the nearest tenth of a percent. State if it is an increase or decrease.

29) From 61 to 86

30) From 67 to 76

31) From 67 to 64

32) From 51 to 12

Find the selling price of each item.

33) Original price of a car: \$22,000.00
Discount: 15%

34) Original price of a CD: \$15.50
Discount: 40%

35) Original price of a cell phone: \$199.95
Discount: 40%

36) Original price of a computer: \$3,000.00
Discount: 30%

Use simple interest to find the ending balance.

37) \$400 at 14% for 5 years

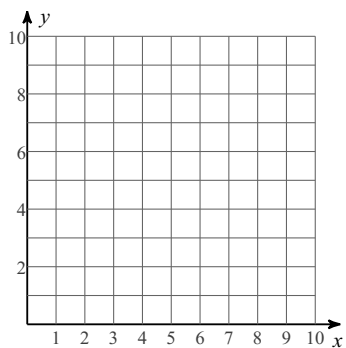
38) \$40,200 at 1% for 5 years

39) \$59,200 at 15% for 2 years

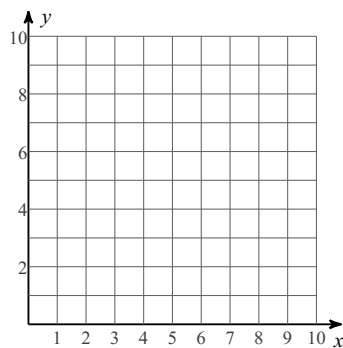
40) \$275 at 8% for 4 years

Plot each point.

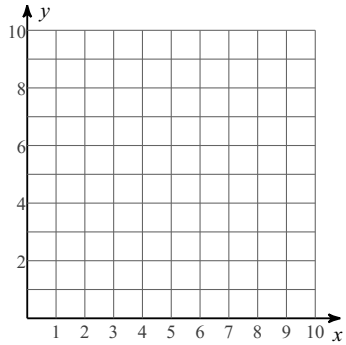
41) $G(7, 3)$ $H(6, 8)$ $I(0, 0)$
 $J(3, 4)$ $K(0, 7)$



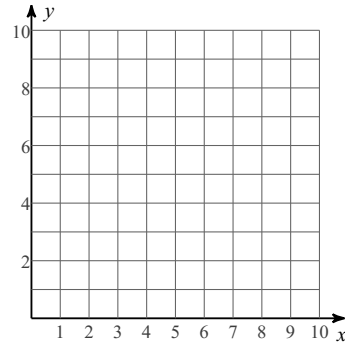
42) $S(0, 0)$ $T(8, 8)$ $U(3, 8)$
 $V(5, 7)$ $W(5, 5)$



43) $S(6, 8)$ $T(1, 9)$ $U(7, 4)$
 $V(0, 4)$ $W(10, 6)$



44) $I(4, 1)$ $J(4, 2)$ $K(1, 5)$
 $L(6, 6)$ $M(9, 5)$



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

45) $(-7, -7), (10, 9)$

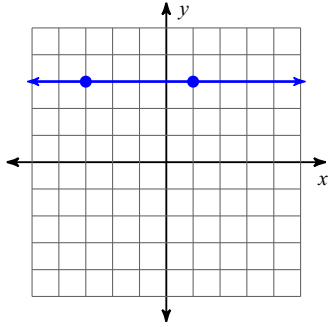
46) $(1, 0), (-10, -2)$

47) $(-4, -6), (4, -6)$

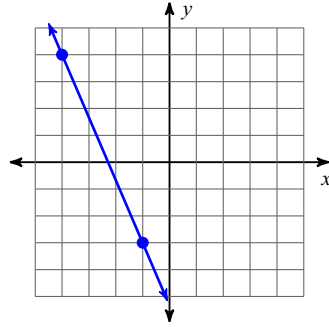
48) $(3, -10), (6, -7)$

Find the slope of each line.

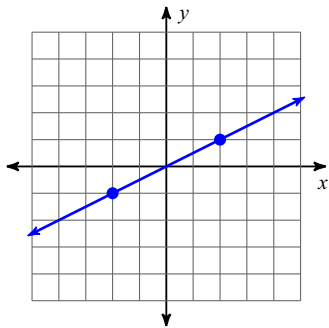
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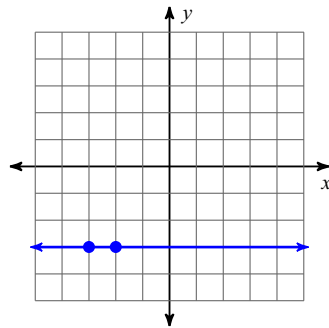
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51)

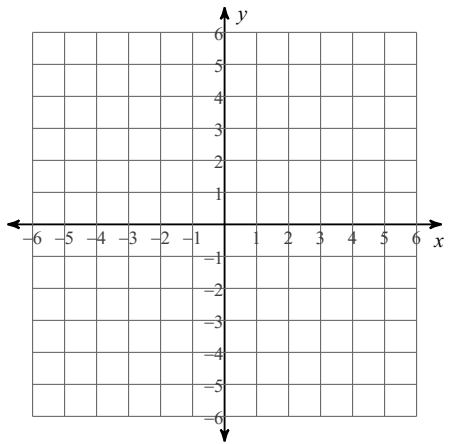


52)

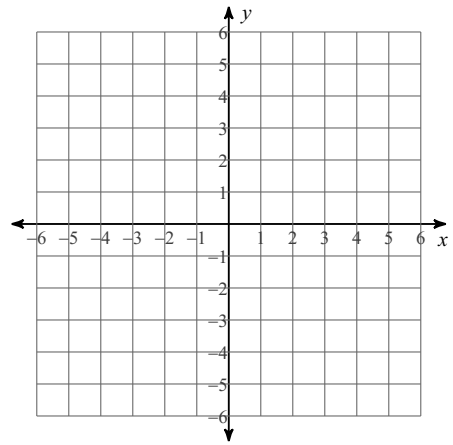


Sketch the graph of each line.

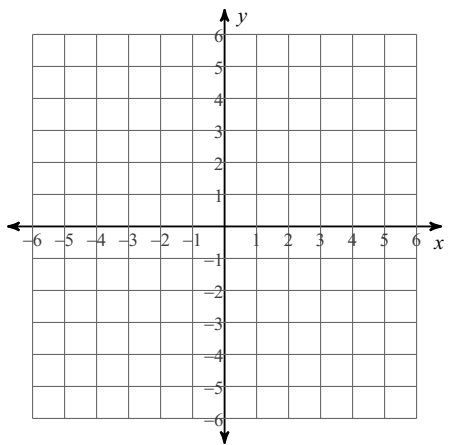
53) $y = -2x - 1$



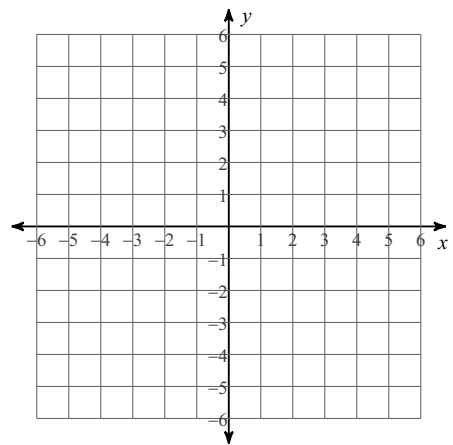
54) $y = \frac{7}{5}x + 5$



55) $x = -2$

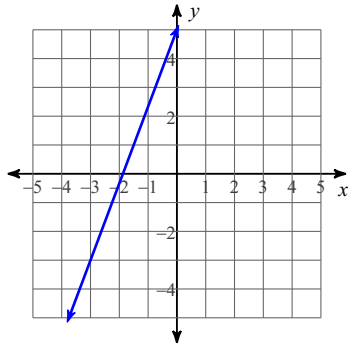


56) $y = x - 4$

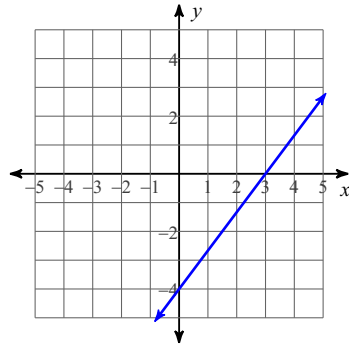


Write the slope-intercept form of the equation of each line.

57)



58)



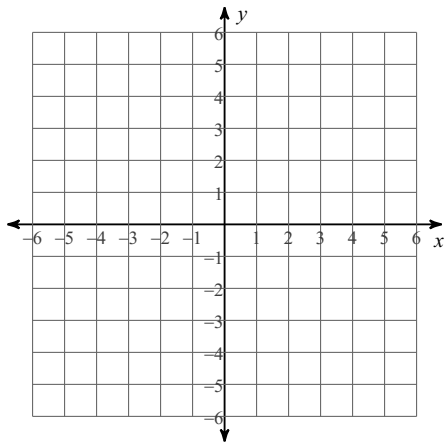
Write the slope-intercept form of the equation of each line given the slope and y-intercept.

59) Slope = $-\frac{1}{5}$, y-intercept = -2

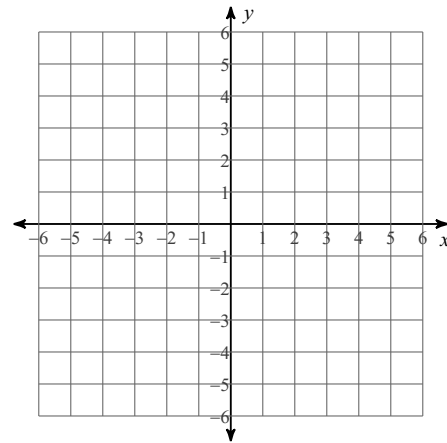
60) Slope = -2 , y-intercept = 1

Sketch the graph of each linear inequality.

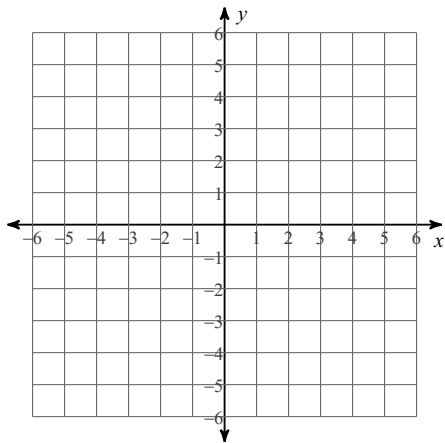
61) $y < 2x + 4$



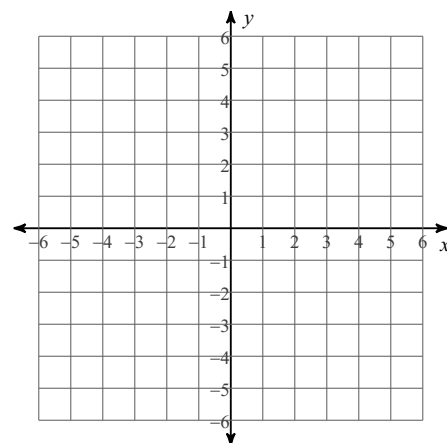
62) $y > -\frac{1}{3}x - 5$



63) $y \leq 5x + 1$



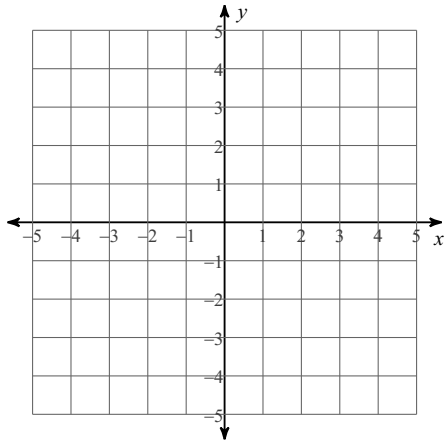
64) $y < -\frac{5}{4}x$



Solve each system by graphing.

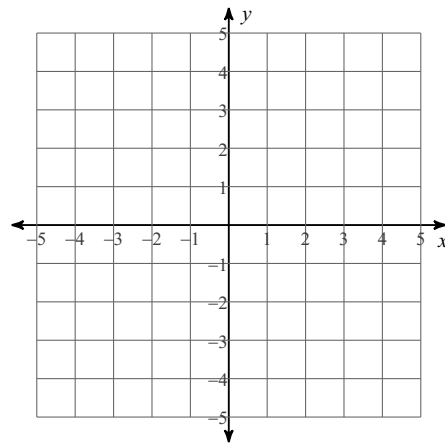
$$65) y = -\frac{1}{2}x + 3$$

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

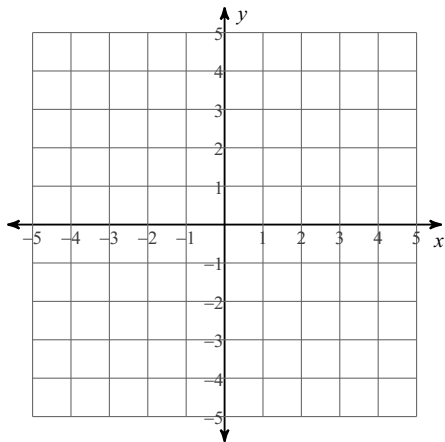


$$66) y = -\frac{4}{3}x - 3$$

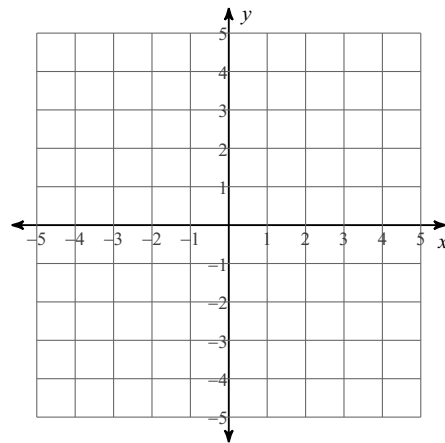
$$y = x + 4$$



$$67) \begin{aligned} x &= 1 \\ y &= x + 1 \end{aligned}$$



$$68) \begin{aligned} y &= -\frac{1}{3}x + 4 \\ y &= \frac{1}{3}x + 2 \end{aligned}$$



Solve each system by substitution.

$$69) \begin{aligned} 7x + 2y &= 21 \\ y &= -2x \end{aligned}$$

$$70) \begin{aligned} -5x + 3y &= 12 \\ y &= x \end{aligned}$$

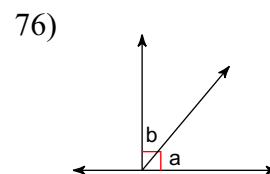
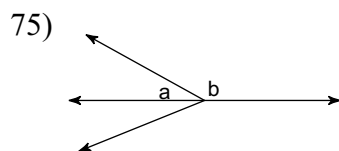
$$71) \begin{aligned} y &= 7x \\ -5x + 6y &= 0 \end{aligned}$$

$$72) \begin{aligned} 3x - y &= 0 \\ y &= 3x \end{aligned}$$

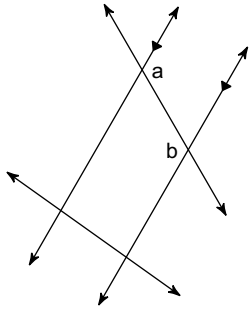
73) There are 14 animals in the field. Some are cows and some are ducks. There are 40 legs in all. How many of each animal are in the field?

74) There are 19 animals in the barn. Some are geese and some are buffalo. There are 58 legs in all. How many of each animal are there?

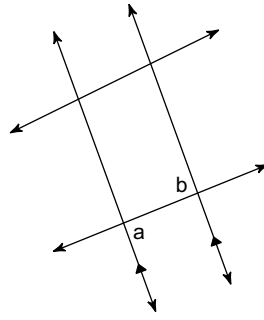
Name the relationship: complementary, supplementary, vertical, adjacent, alternate interior, corresponding, or alternate exterior.



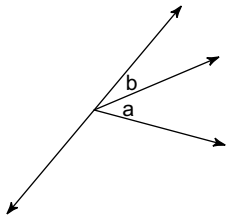
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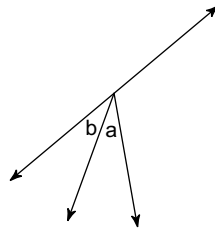
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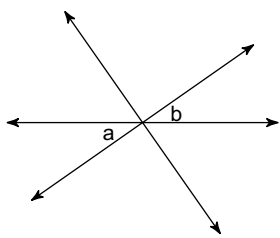
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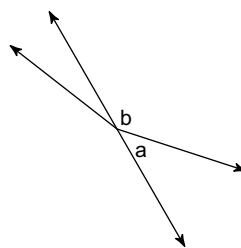
80)



81)

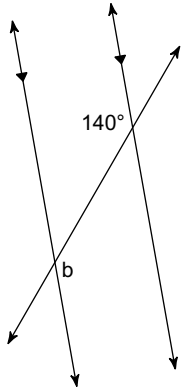


82)

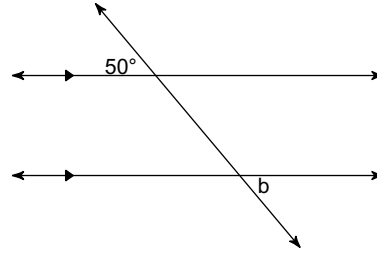


Find the measure of angle b.

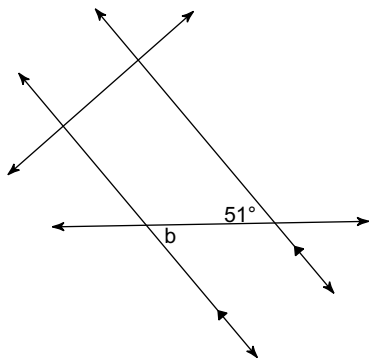
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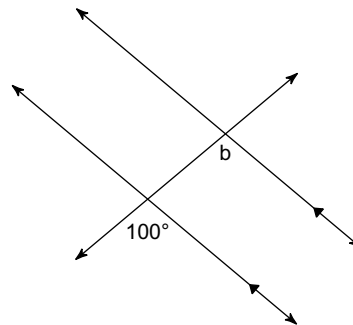
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85)

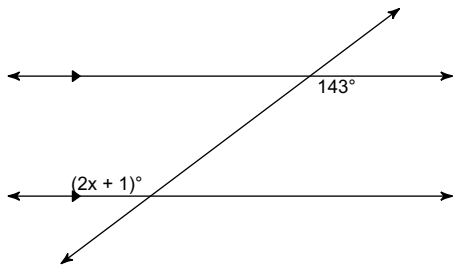


86)

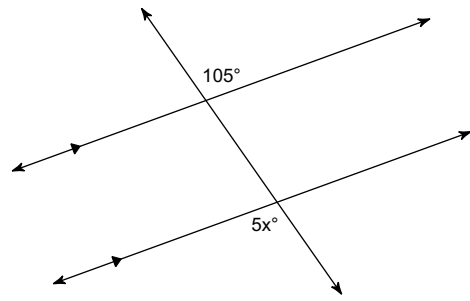


Find the value of x .

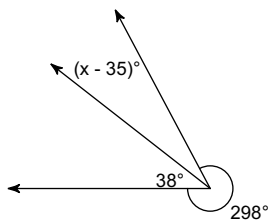
87)



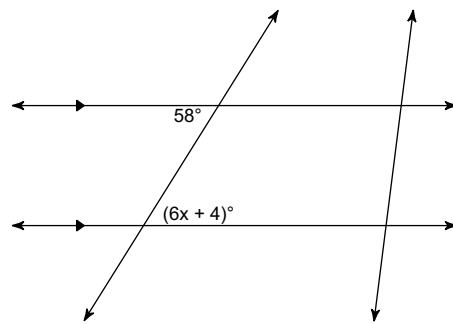
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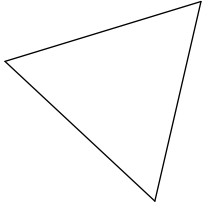


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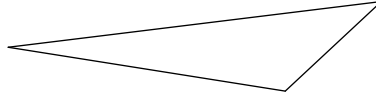


Classify each triangle by its angles and sides.

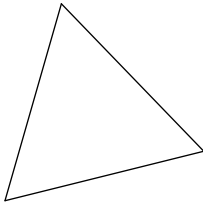
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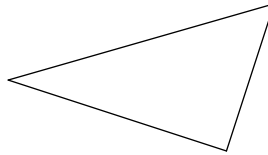
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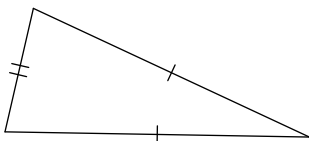
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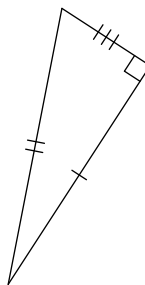
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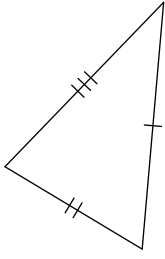
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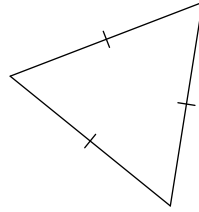
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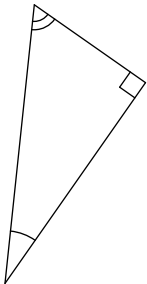


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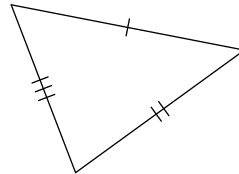


Classify each triangle by its angles.

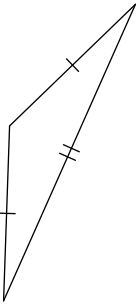
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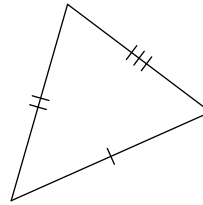
100)



101)

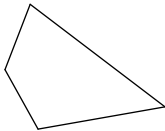


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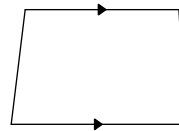


Classify each quadrilateral with the name that best describes it.

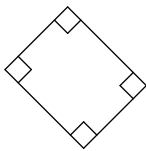
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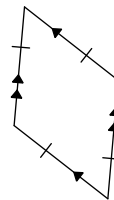
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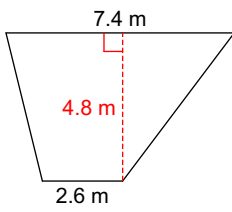


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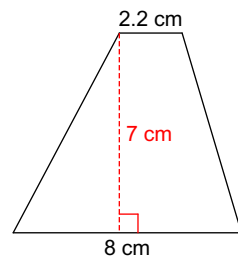


Find the area of each.

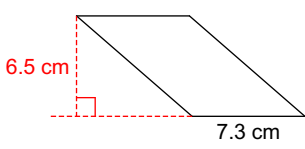
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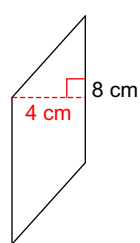
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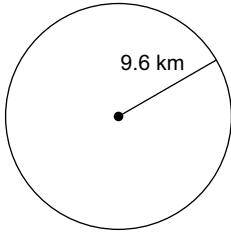


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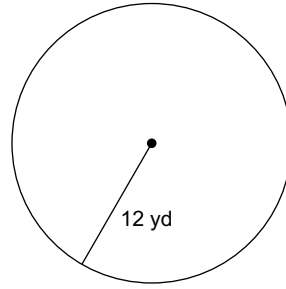


Find the area of each. Round your answer to the nearest tenth.

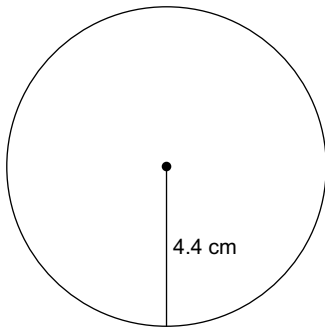
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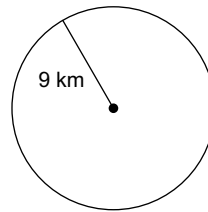
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113)

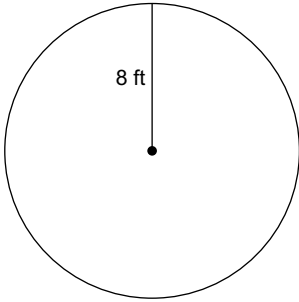


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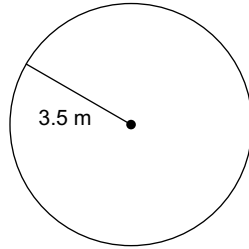


Find the circumference of each circle. Round your answer to the nearest tenth.

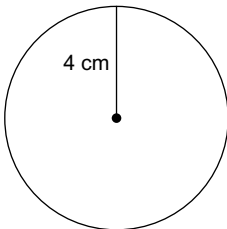
115)



116)



117)



118)

