BOARD PROBLEMS CH. 8/9

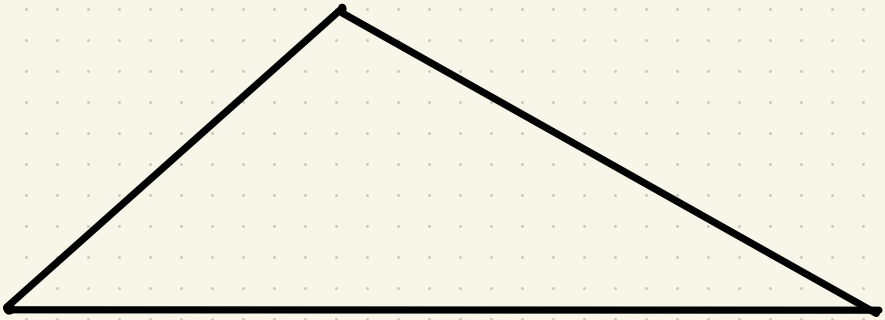
① DEFINE A POSTULATE.

② GIVE AN EXAMPLE OF A POSTULATE.

③ DRAW A TRIANGLE W/SIDES 4", 5" & 6".

a) BISECT ALL THE ANGLES

b) USE A COMPASS TO DRAW A CIRCLE INSIDE THE TRIANGLE, CENTERED AT THE INTERSECTION OF THE 3 bisectors THAT TOUCHES IN EXACTLY ONE POINT ON EACH SIDE (a CENTROID).



Ch. 8/9 - Perimeter & Area

Definition of PeRIMeter: Distance around the sides of a figure.
Units are expressed in one-dimension, length.

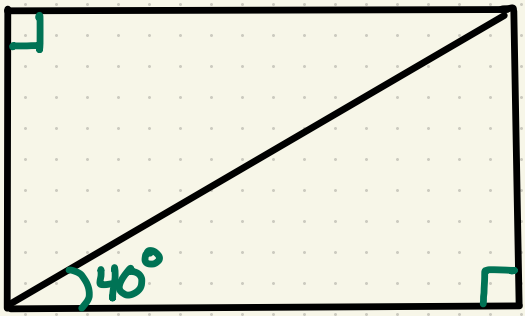
Quadrilaterals: a shape with 4-sides

A) Rectangle: A quadrilateral with 4 right angles

B) Parallelogram: A quad. With two pairs of parallel sides.

C) Rhombus - a quad. With four congruent sides

D)Trapezoid - a quad. With only one pair of parallel sides.

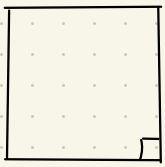


THE SUM OF ALL INTERIOR ANGLES IN A TRIANGLE IS: _____

THE SUM OF ALL INTERIOR ANGLES IN A QUADRILATERAL: _____

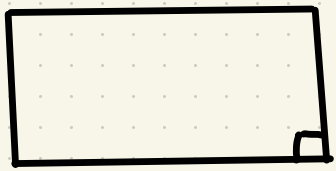
Ch.9 - AREA

① SQUARE:



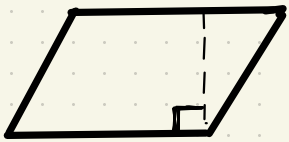
A = _____

② RECTANGLE:



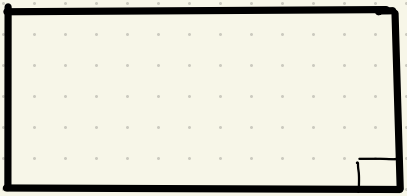
A = _____

③ PARALLELOGRAM:



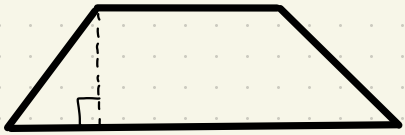
A = _____

④ TRIANGLE:



$A =$ _____

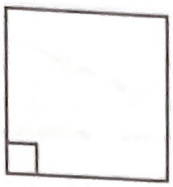
⑤



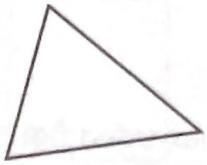
TRAPEZOID

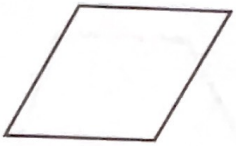
$A =$ _____

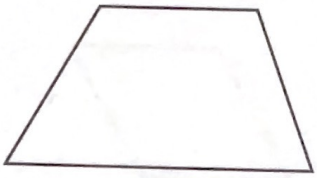
Identify the shapes, using the names studied in this lesson.

1. _____ 

2. _____ 

3. _____ 

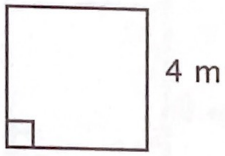
4. _____ 

5. _____ 

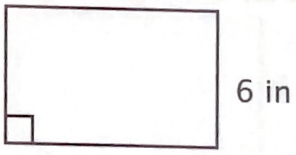
6. _____ 

Find the perimeter.

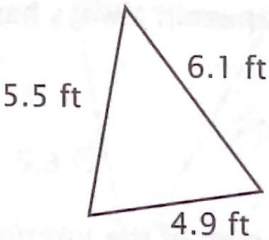
7. P = _____



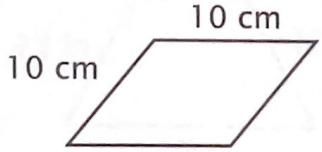
8. P = _____



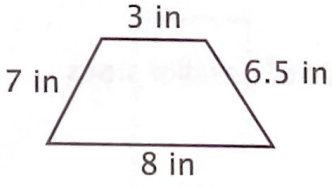
9. P = _____



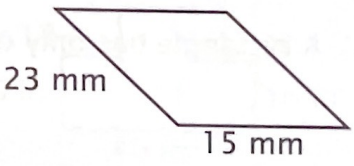
10. P = _____



11. P = _____



12. P = _____



True or false.

13. Perimeter is the distance around a shape or figure.

14. Any four-sided figure can be called a quadrilateral.

15. The sum of the interior angles of a quadrilateral add up to 180°.

16. A square is a rhombus with four right angles.

17. A trapezoid always has at least one right angle.

18. The sum of the interior angles of a triangle add up to 180°.

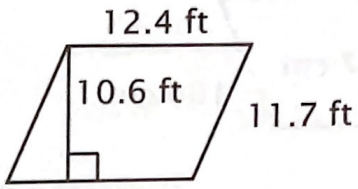
19. A rectangle has only one pair of parallel sides.

20. A square is a rectangle with all four sides equal.

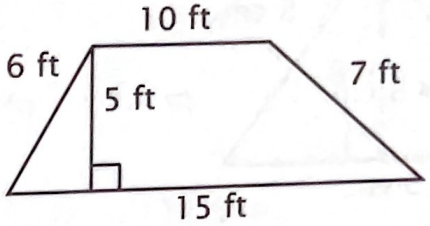
ESSON PRACTICE

Find the area of each figure.

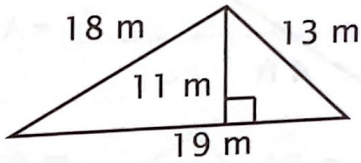
1. A = _____



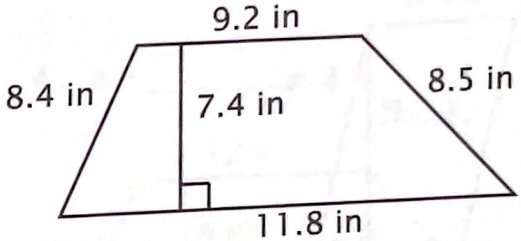
2. A = _____



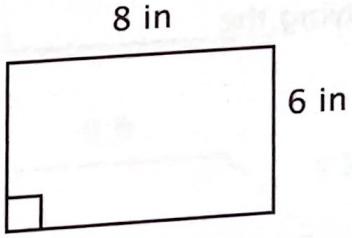
3. A = _____



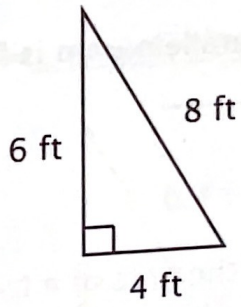
4. A = _____



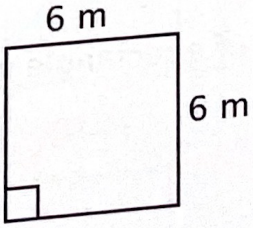
5. A = _____



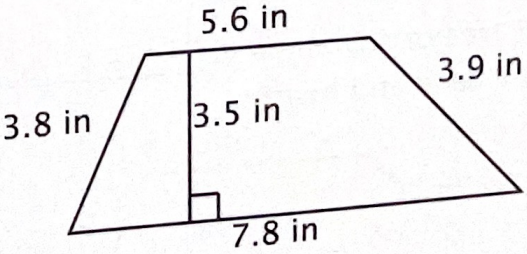
6. A = _____



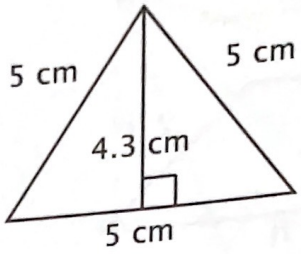
7. A = _____



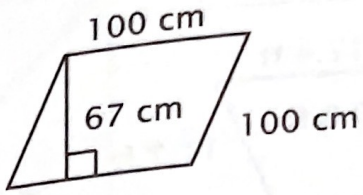
8. A = _____



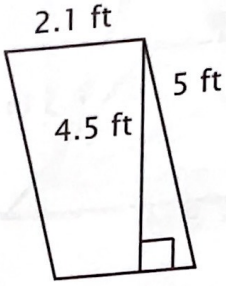
9. A = _____



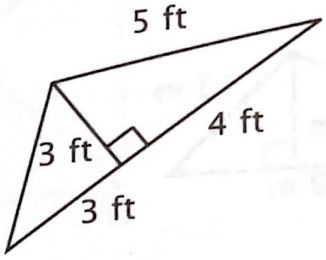
10. A = _____



11. A = _____



12. A = _____



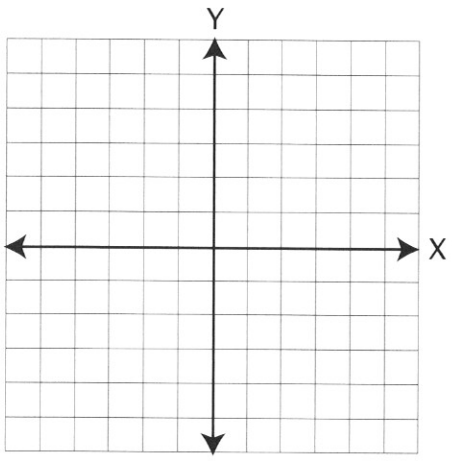
13. The area of a parallelogram is found by multiplying the _____ by the _____ .

14. In order to find the area of a trapezoid, it is first necessary to find the _____ base.

15. The area of a triangle is _____ the area of a rectangle with the same base and height.

LESSON PRACTICE

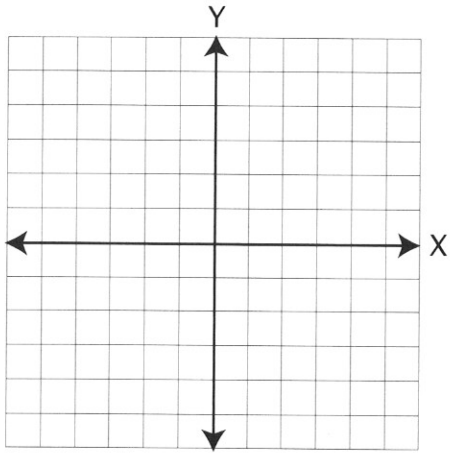
Identify the slope and intercept of each equation.
Then draw the line corresponding to the equation.



1. $Y = -2X - 5$

   m = _____

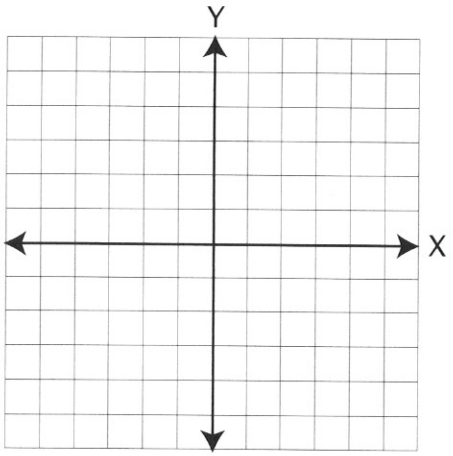
   b = _____



2. $Y = -3/2\ X$

   m = _____

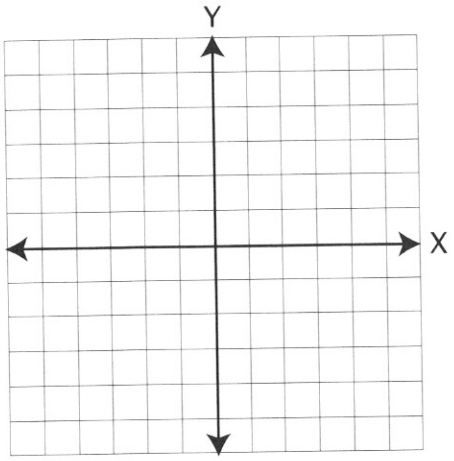
   b = _____



3. $X = 0$

   m = _____

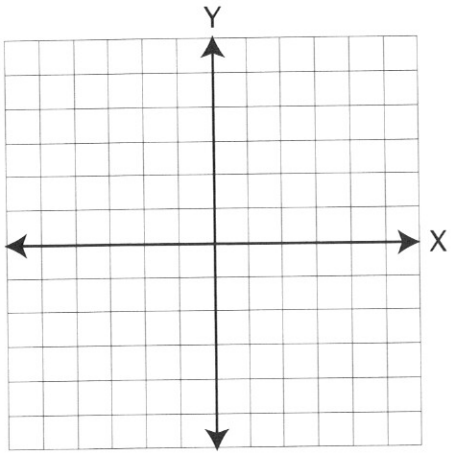
   b = _____



4. Y = -3X + 2

   m = _____

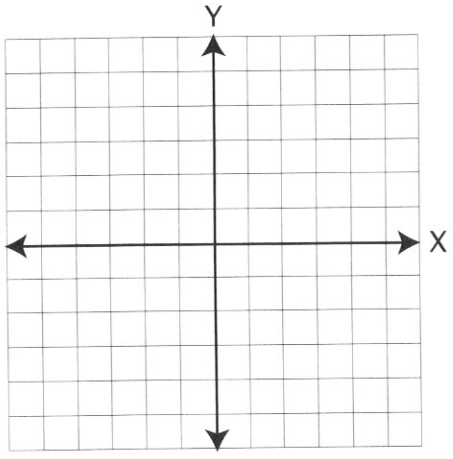
   b = _____



5. Y = 2X - 1

   m = _____

   b = _____



6. Y = 4

   m = _____

   b = _____

SYSTEMATIC REVIEW

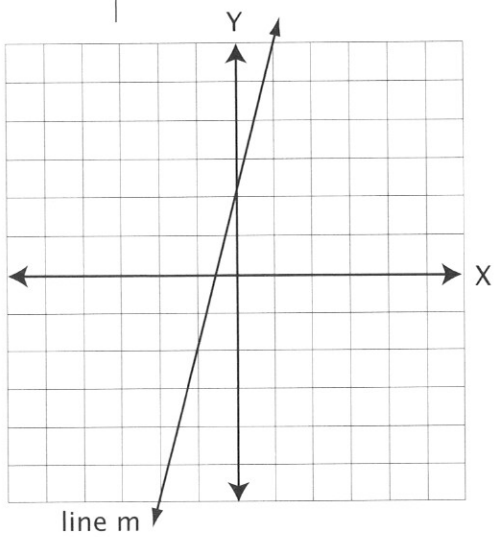
1. Joey borrowed four dollars to open a video store. He lost one dollar each day. Fill in the table on the right.

Day	Dollars

2. Plot these points and connect them.

3. Write an equation for the line.

(Dollars = ___ per Day - ___ borrowed)



4. Given: Y = -2X.
This time Joey started with
_____ dollar(s) and lost
_____ dollars each day.
Use the table under the graph.

5. Graph the points and the line.

6. The slope is _____ and the intercept is _____ .

Day	Dollars

7. Estimate the slope and intercept of line *m* on the graph.

8. What would the equation of the line be using the slope-intercept formula?

9. This line is graphed within which quadrants?

10. Graph Y = -2 and label it line *g*.

Simplify and solve for the unknown.

11. $60R - 90R = 70$

12. $-18 + 54X = 27$

13. $[(6 + 5)^2 - 1] \div 12 = 3X + |-2X|$
X is positive

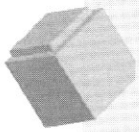
14. $4B - 32B = 36B - 8BY \ (4B \neq 0)$

15. $1.03 - .8Y = 5$

16. $3\frac{3}{4}Y = 2\frac{1}{5} + 3\frac{5}{6}$

17. $5X - 20 = 50X + 35$

18. $\frac{3}{10}X - 3\frac{1}{6}X = 4\frac{1}{4}$



QUICK REVIEW

"What fraction of 6 is 3?" is written as WF x 6 = 3.

EXAMPLE Write an equation and solve: What fraction of 10 is 5?
WF x 10 = 5 Solving for the unknown :

$$\frac{1}{10}(WF \times 10) = \frac{1}{10}(5) \rightarrow WF = \frac{5}{10} = \frac{1}{2}$$

19. Write an equation and solve:
What fraction of 7 is 5?

20. Write an equation and solve:
What fraction of 5 is 2?