

CH. 10 - BOARD PROBLEMS

FIND AREA & PERIMETER.

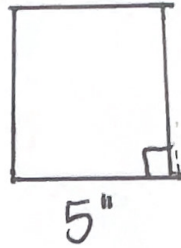
①



P = _____

A = _____

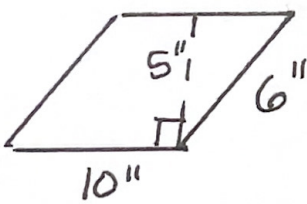
②



P = _____

A = _____

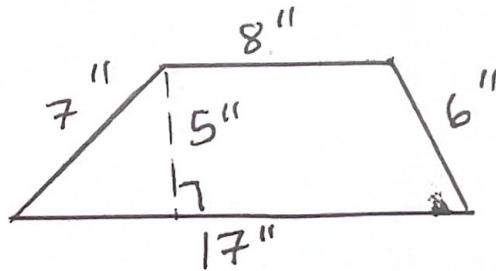
③



P = _____

A = _____

④



P = _____

A = _____

⑤ DRAW A 165° ANGLE. BISECT ANGLE THEN DRAW \perp BISECTORS THROUGH BOTH SIDES.

First Geometry Class NEXT Week!

- 1) Formula and Definition Sheet must cover each chapter (label each chapter on Sheet! Worth 10 Test Points!
- 2) Take the Unit I test in Test Booklet!
- 3) Correct Test and make sure you can do all of the problems!

GEOMETRY Ch.10

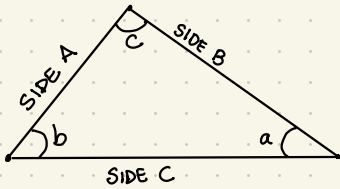
Construct a triangle with 3 different length sides

MEASURE EACH SIDE, MEASURE EACH ANGLE.

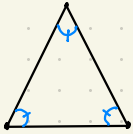
SIDE A _____ $\angle a$ _____

SIDE B _____ $\angle b$ _____

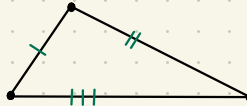
SIDE C _____ $\angle c$ _____



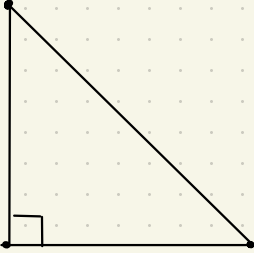
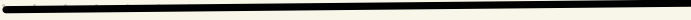
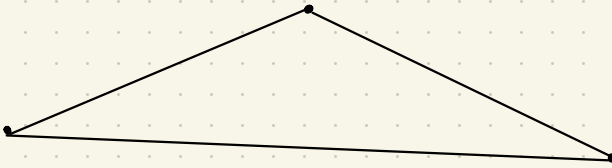
SUM OF INTERIOR ANGLES



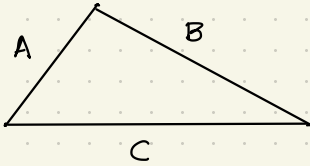








TRIANGLE SIDE LENGTH LIMITATIONS



GIVEN $SIDE A \leq SIDE B \leq SIDE C$

$SIDE A + SIDE B > SIDE C$
(must be)

ARE THESE POSSIBLE TRIANGLES?

4, 7, 13? _____

3, 4, 6? _____

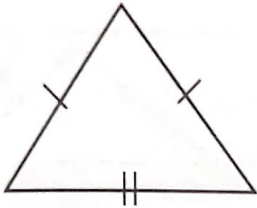
2, 8, 10? _____

LESSON PRACTICE

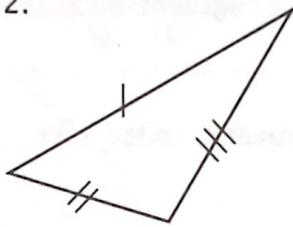
10A

Describe each triangle according to the sides.

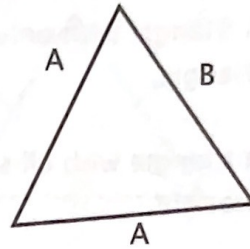
1.



2.

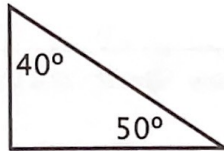


3.

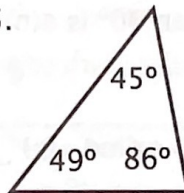


Describe each triangle according to the angles.

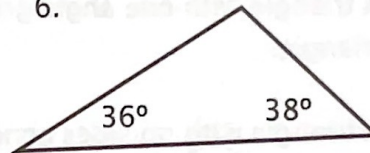
4.



5.



6.



7. Can there be an isosceles right triangle?

8. Explain the reason for your answer to #7.

9. Can you have a triangle with sides 5, 7, and 15?

10. Can you have a triangle with sides 8, 9, and 11?

Fill in the blanks.

11. A triangle with only two sides congruent is called a(n) _____ triangle.
12. A triangle with all sides congruent is called a(n) _____ triangle.
13. If a triangle is equiangular, all of its _____ have the same measure.
14. A triangle with all of its angles greater than 0° and less than 90° is a(n) _____ triangle.
15. A triangle with one angle greater than 90° is a(n) _____ triangle.
16. A triangle with no sides congruent is called a(n) _____ triangle.
17. If one angle in a triangle is equal to 90° , the triangle is a(n) _____ triangle.

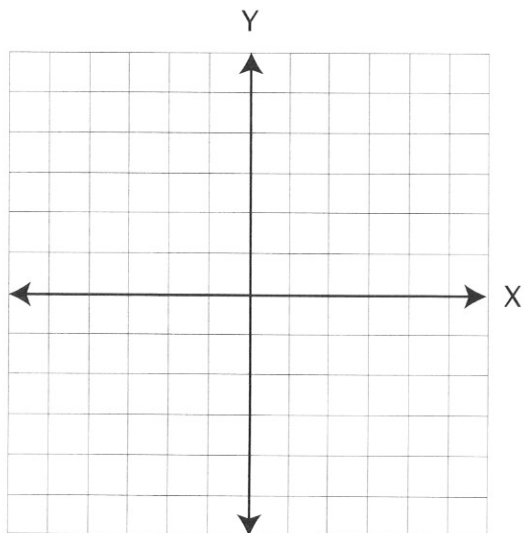
Construct each of the following triangles and label the size of each angle.
Use another paper if necessary.

18. right triangle.
19. acute triangle.

20. isosceles triangle.

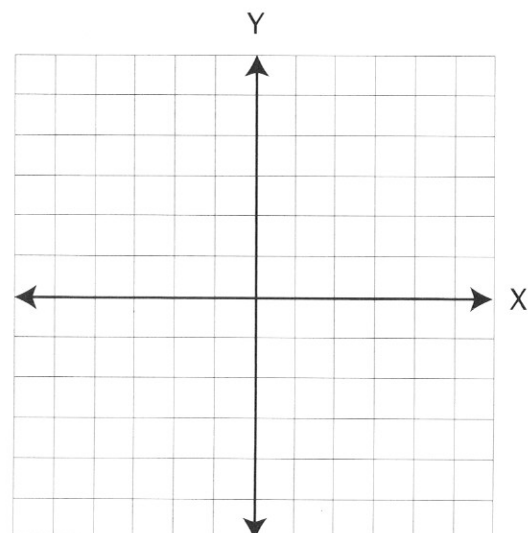
LESSON PRACTICE

Plot the points, draw a line to connect them, and find the slope–intercept formula for the line.



1. $(-4, -6), (4, 0)$

$Y =$ _____



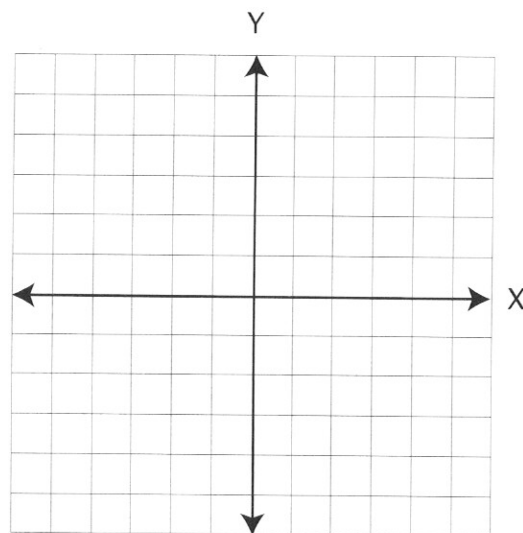
2. $(-2, 2), (1, 5)$

$Y =$ _____

Plot the points and draw the line. Find the slope–intercept form and the standard form of the equation of the line.

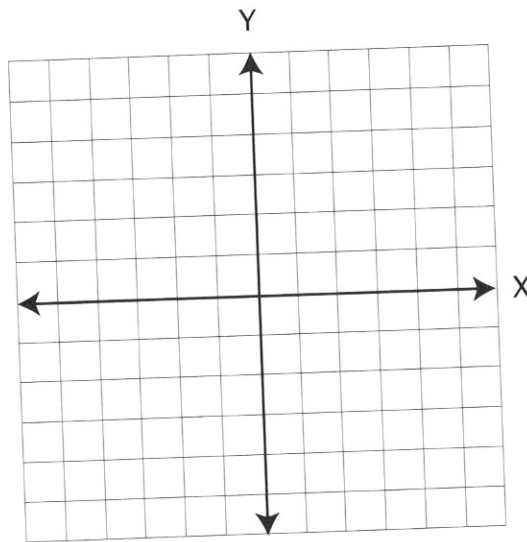
3. $(-3, -2), (4, -2)$

$Y =$ _____



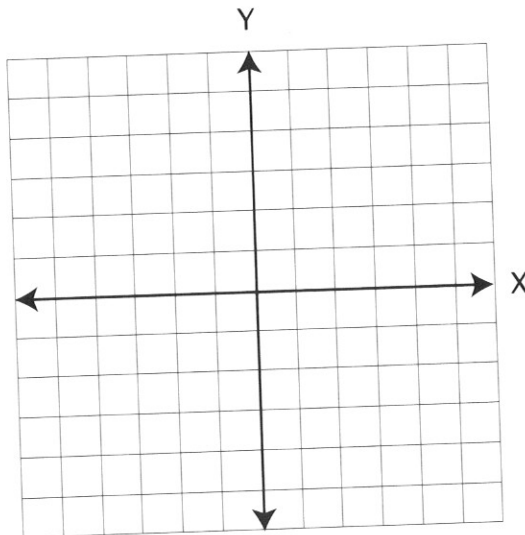
4. $(0, 2), (6, -6)$

$Y =$ _____



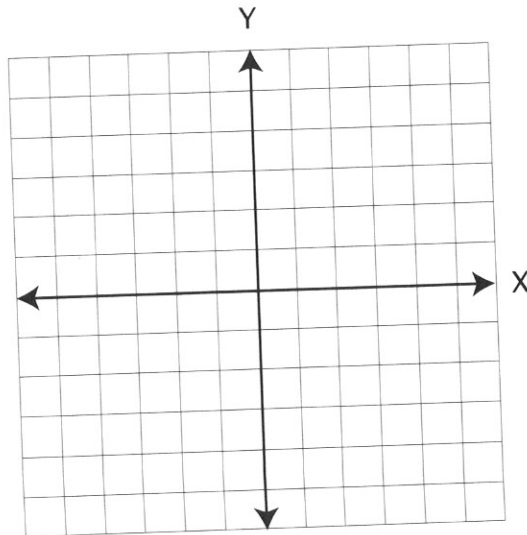
5. $(-3, 6), (0, 0)$

$Y =$ _____



6. $(3, 5), (3, -1)$

$Y =$ _____



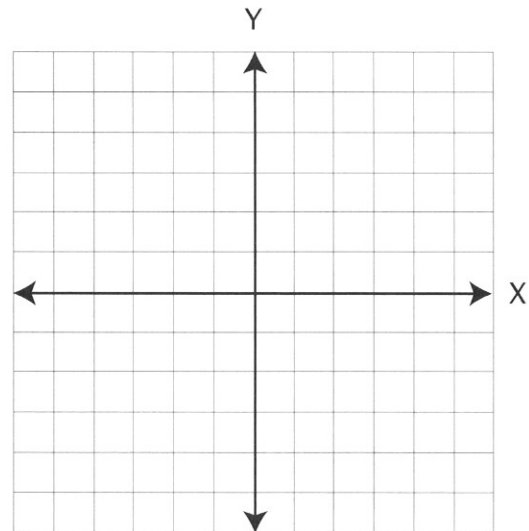
Follow the directions for each graph.

7. Plot the points $(2, 0)$ and $(4, -3)$.

8. Make a right triangle and determine the slope.

9. Estimate the intercept by extending the line until it intercepts the Y-axis.

10. Describe the new line using the slope-intercept formula.



11. Which of the following lines are parallel to the line you drew? Put each equation into the slope-intercept form before answering.

A. $2Y = 3X + 10$

B. $2Y - 3X = -4$

C. $2Y + 3X = 0$

12. Draw a line that is parallel to the line described in #10, and that passes through the point $(2, -5)$.

13. Describe the new line using the slope-intercept form of the equation of a line.

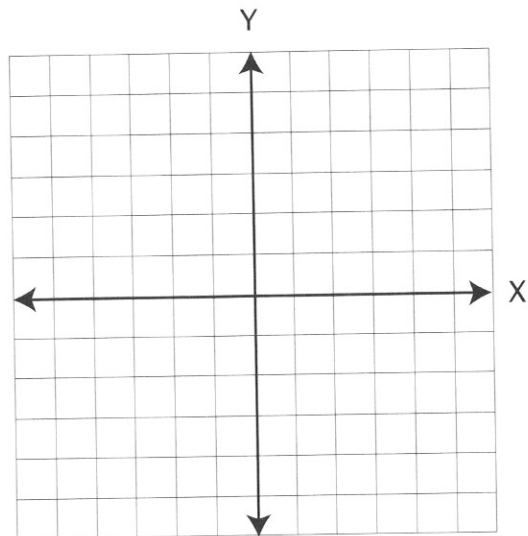
14. Describe the new line with the standard form of the equation of a line.

15. Plot the points (1, 3) and (-1, -5).

16. Make a right triangle and determine the slope.

17. Estimate the intercept by extending the line until it intercepts the Y-axis.

18. Describe the new line using the slope-intercept formula.



19. Which of the following lines is parallel to $Y = \frac{3}{2}X - 2$?

A. $2Y = -5X - 4$

B. $3Y = 6X$

C. $4Y = 6X + 4$

20. Draw a line that is parallel to the line described in #18 that passes through the point (0, 3).

21. Describe the new line using the slope-intercept form of the equation of a line.

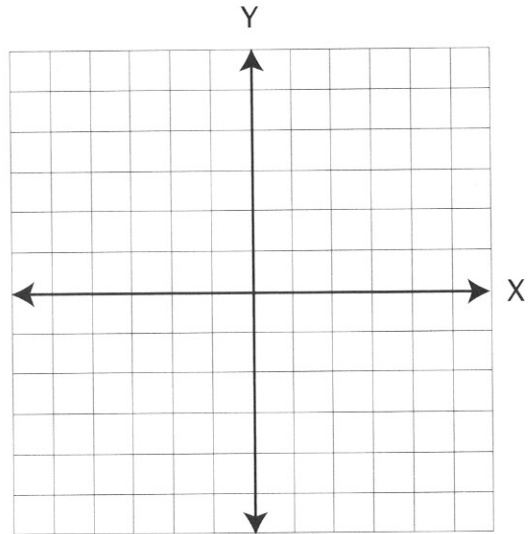
22. Describe the new line with the standard form of the equation of a line.

1. Plot the points (2, 6) and (-1, 3).

2. Make a right triangle and determine the slope.

3. Estimate the intercept by extending the line until it intercepts the Y-axis.

4. Describe the line using the slope-intercept form, and then give the standard form of the equation of a line.



5. Which of the following lines is parallel to $Y = -X + 2$?

A. $2Y = -2X - 2$

B. $3Y = 4X + 1$

C. $5Y = -5X$

6. Draw a line that is parallel to the line described in #4 while passing through the point (2, 2).

7. What will be the slope of a line parallel to $Y = 2X - 4$?

8. What will be the slope of a line parallel to $4Y = -12X - 4$?

9. Rewrite as the standard form of the equation of a line: $Y - 3 = \frac{1}{3}X - 1$.

10. Rewrite using the slope-intercept form: $2Y + 3X = 1$.

Simplify and solve for the unknown.

$$11. (3 - 11)^2 \times 2 \div 16 - 7 = 3Y - 4Y + 9$$

$$12. (3 - 5)^2 + |6 - 4| - X = 3X$$

$$13. 3(A - 4) - 5(2A - 6) = 21$$

$$14. 1\frac{1}{3} + \frac{4}{5}A = 2\frac{1}{5}$$

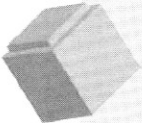
Simplify.

$$15. -6^2 - (-6)^2 =$$

$$16. 5 + 5 - (-7) =$$

$$17. -[-(-7)] =$$

$$18. (-8)^2 =$$



QUICK REVIEW

To find the percent of a number, change the percent to a decimal and multiply.

EXAMPLE Shipping is 8%. What will it cost to ship a package worth \$25.50?

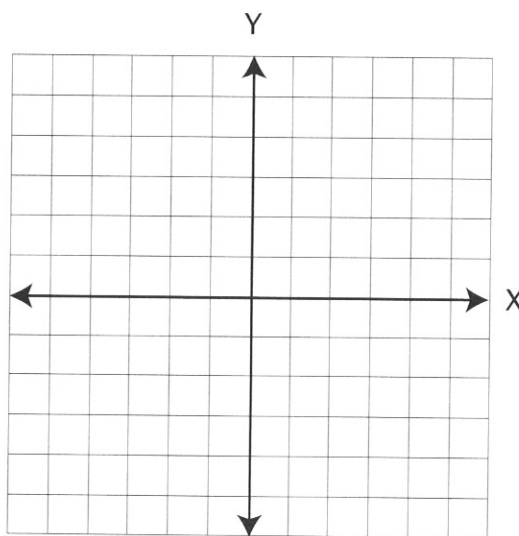
8% is the same as .08.

$$25.50 \times .08 = \$2.04 \text{ cost of shipping}$$

19. Mr. Brown gets a profit of 25% of the total (retail) cost of each item he sells. What is his profit on an item that sells for \$76.98? Round your answer to the nearest hundredth.
20. Forty-five percent of the people had brown eyes. If there were 600 people, how many had brown eyes?

SYSTEMATIC REVIEW

1. Plot the points (5, 1) and (-1, -5).
2. Make a right triangle and determine the slope.
3. Estimate the intercept by extending the line until it intercepts the Y-axis.
4. Describe the line using the slope-intercept form, and then give the standard form of the equation of a line.
5. Which of the following lines is parallel to $Y = \frac{1}{4}X - 3$?
 - A. $2Y = \frac{1}{3}X + 2$
 - B. $4Y = 4X + 3$
 - C. $3Y = \frac{3}{4}X + 6$
6. Draw a line that is parallel to $Y = \frac{1}{4}X - 3$ while passing through the point (0, -1).
7. Describe the new line using the slope-intercept form.
8. What will be the slope of a line parallel to $3Y = -6X + 9$?
9. Rewrite in the standard form of the equation of a line: $Y = 2X + 5$.
10. Rewrite using the slope-intercept form: $4Y + 2X = 8$.



Simplify and solve for the unknown.

$$11. |-1 - 1 - 1 - 1|^2 = (-1)^2 + B(-1) \div 1$$

$$12. (3 + 5)^2 + |8 - 11| + Z = 4(Z - 2)$$

$$13. 5(B - 6) + 4(2B + 7) = 102$$

$$14. 55Q - 30Q = 125$$

Simplify.

$$15. -\{-[-(-8)]\}$$

$$16. -9^2 =$$

$$17. -(-4) =$$

$$18. 3^2 + (-3)^2 =$$

19. A Canadian came to America and exchanged his money for U.S. dollars at an exchange rate of 76%. If he exchanged \$200, how much did he receive in U.S. funds? (Find 76% of 200.)

20. $WF \times 8 = 2$ (Check your answer by multiplying.)