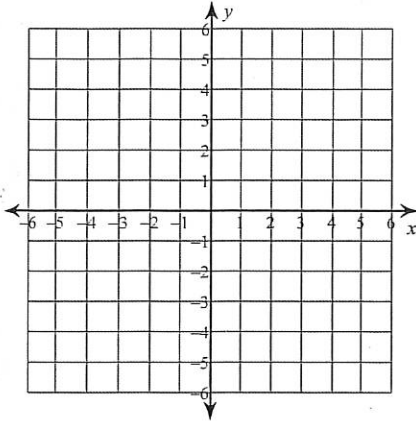


Graphing Lines

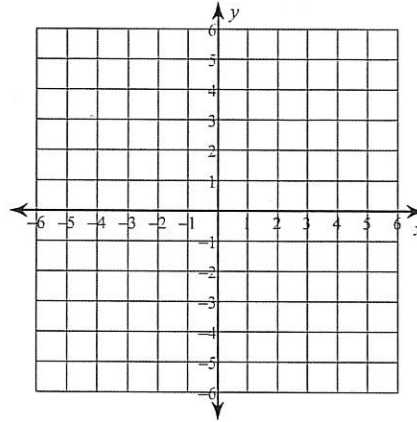
Date _____ Period _____

Sketch the graph of each line.

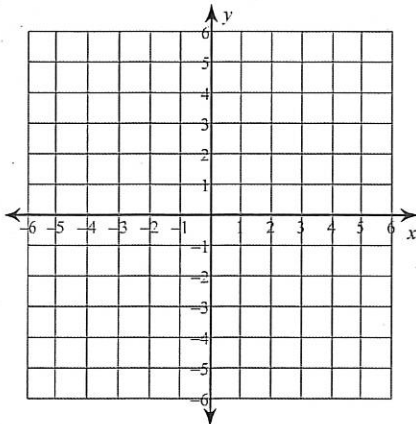
1) $y = \frac{7}{2}x - 2$



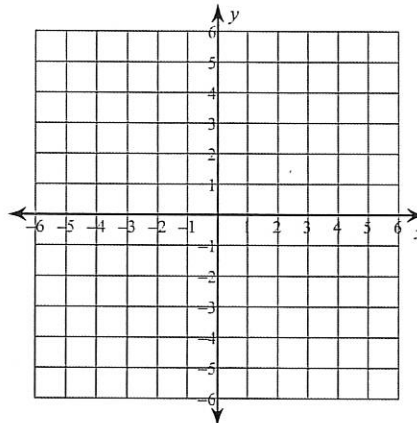
2) $y = -6x + 3$



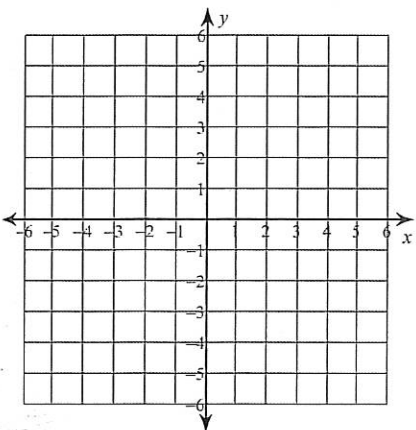
3) $y = -5$



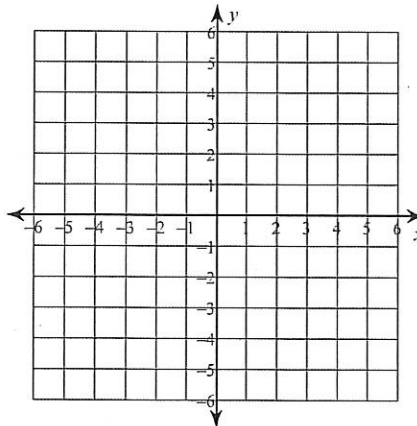
4) $y = \frac{6}{5}x + 1$



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

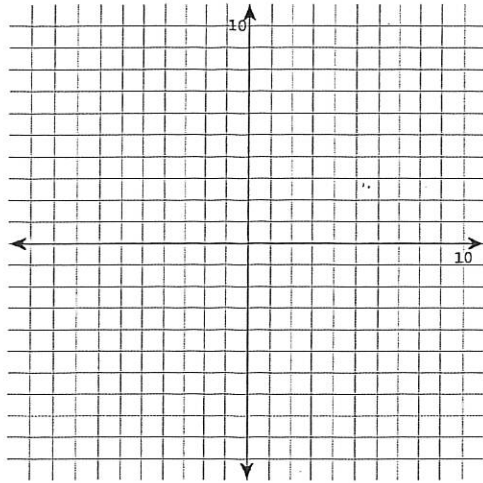


6) $x = 5$



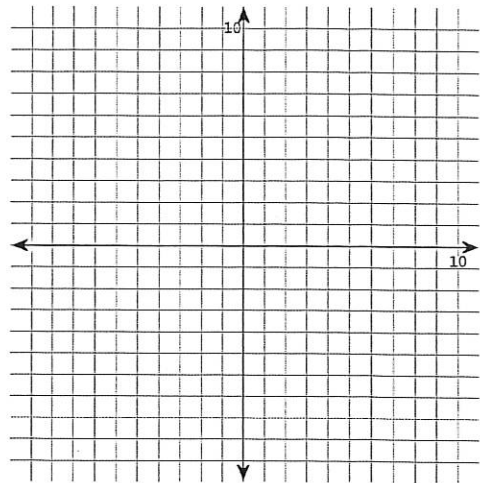
Graphing Worksheet

1 a.



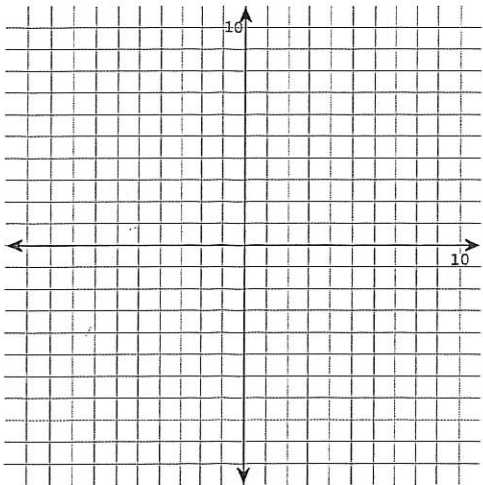
Graph the equation $y = 4x - 2$.

1 b.



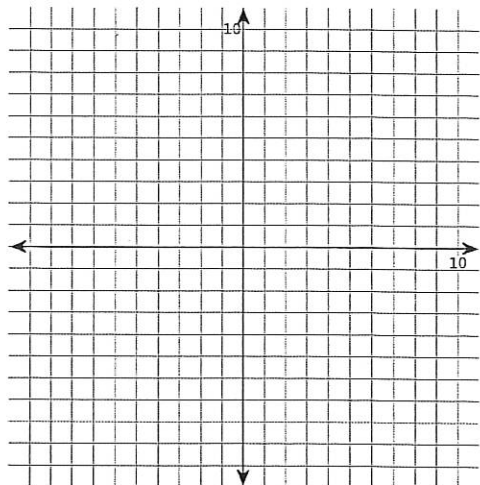
Graph the equation $y = -5x + 4$.

2 a.



Graph the equation $y = -2x - 3$.

2 b.



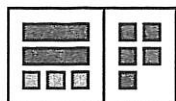
Graph the equation $y = -4x - 3$.

Solving Two-Step Equations

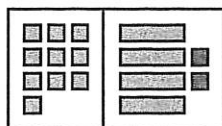
Write the equation represented by each equation box.
Then solve the equation.

1. _____ 2. _____ 3. _____

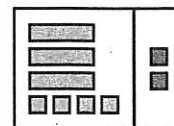
$x =$ _____



$x =$ _____



$x =$ _____



For each equation, tell whether the number in bold is a solution.

4. $\frac{p}{7} = -14$; **-98** _____ 5. $-2x + 3 = 5$; **2** _____ 6. $\frac{a}{-8} - 5 = -3$; **-16** _____
 7. $\frac{u}{-5} + 7 = 12$; **30** _____ 8. $4x + (-3) = 9$; **3** _____ 9. $\frac{q}{3} + (-4) = 11$; **-15** _____

Solve each equation. Check your solutions.

10. $3b + (-7) = -25$ 11. $\frac{n}{-4} + (-3) = 8$ 12. $16 = 4h - 12$ 13. $\frac{x}{6} - (-10) = 3$

$b =$ _____ $n =$ _____ $h =$ _____ $x =$ _____

14. $8w - 17 = -89$ 15. $\frac{c}{7} - 12 = -4$ 16. $\frac{p}{-5} + 12 = 20$ 17. $5j + (-16) = -76$

$w =$ _____ $c =$ _____ $p =$ _____ $j =$ _____

18. $\frac{k}{-3} + (-8) = -8$ 19. $-11z + 42 = 86$ 20. $15 = \frac{d}{2} - (-12)$ 21. $13r - (-12) = 103$

$k =$ _____ $z =$ _____ $d =$ _____ $r =$ _____

22. $\frac{g}{12} + (-8) = -5$ 23. $24 = \frac{m}{-5} + 17$ 24. $42 = 7t - 42$ 25. $-18y + 14 = -166$

$g =$ _____ $m =$ _____ $t =$ _____ $y =$ _____

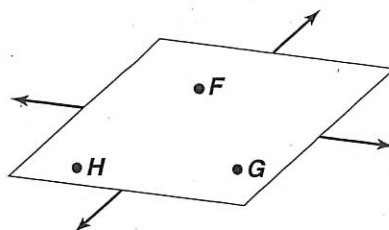
26. The area of a trapezoid is 32 cm^2 . Its height is 8 cm and one base has length 3 cm. Write and solve an equation to find the length of the other base.
- _____

27. **Science** Gorillas and chimpanzees can learn sign language to communicate with humans. By 1982, a gorilla named Koko had learned 700 words. This is 50 fewer than 5 times as many words as a chimp named Washoe knew a decade earlier. How many words did Washoe know?
- _____

Reteaching 8-1

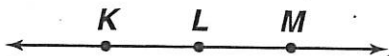
Points, Lines, Segments, and Rays

Each point F , G , and H , indicates an exact location in space.



Plane FGH is flat and extends indefinitely as suggested by the arrows.

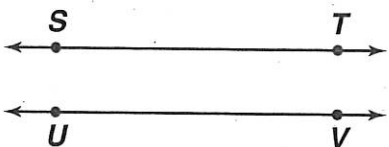
Line KM (\overleftrightarrow{KM}) is a series of points that extends in two opposite directions without end.



Segment LM (\overline{LM}) is part of \overleftrightarrow{KM} . The points L and M are endpoints of \overline{LM} .

Ray LM (\overrightarrow{LM}) is part of a line. Point L is its only endpoint.

\overleftrightarrow{ST} and \overleftrightarrow{UV} are parallel lines. They are in the same plane but do not intersect. They have no points in common.



Points on the same line are *collinear*. Points S and T are collinear.

Skew lines are neither parallel nor intersecting.

Read each statement. Write *true* or *false*.

1. A line has two endpoints.

2. A plane has only two points.

3. A segment is part of a line.

4. A plane is flat.

5. Collinear points lie on different lines.

6. A ray has two endpoints.

7. A ray has no beginning or end.

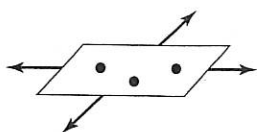
8. A plane contains only one line.

9. Parallel segments do not intersect.

10. Skew lines intersect.

Match each figure with its name.

11.



12.



13.



14.

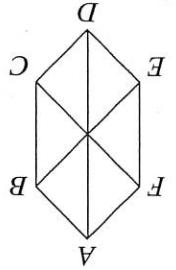


a. ray

b. plane

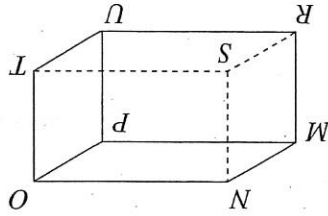
c. line

d. segment



13.

Name the segments that appear to be parallel.



14.

11. A ray _____ has one endpoint.

9. Three points are _____ collinear.

Use *sometimes, always, or never* to complete each sentence.

12. A line _____ has an endpoint.

10. Four points are _____ noncollinear.

7. Draw four collinear points.

6. two pairs of intersecting lines

5. two lines that appear to be parallel

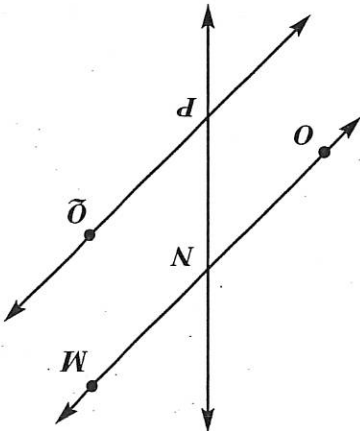
4. three rays

3. three segments

2. three noncollinear points

1. three collinear points

Use the diagram at the right. Name each of the following.



8. Draw five noncollinear points.

Practice 8-1

Points, Lines, Segments, and Rays