

Skill #'s (8-30)

Skill #8--Graph the data and indicate whether or not it represents a line.

1) Goals in a Hockey Game

Goals	Frequency
5	4
7	2
8	1
9	2

2) Times Winning the Basketball Tournament

Times Won	Frequency
1	7
2	2

Skill #9--Generate a table of values fore the given equation.

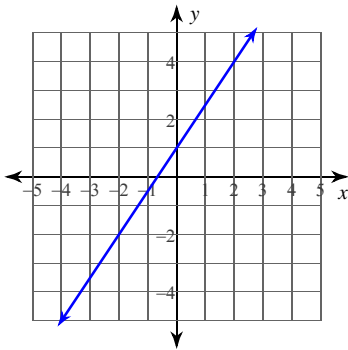
Make sure to include a positive 'x', a negative 'x' and (0)zero.

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

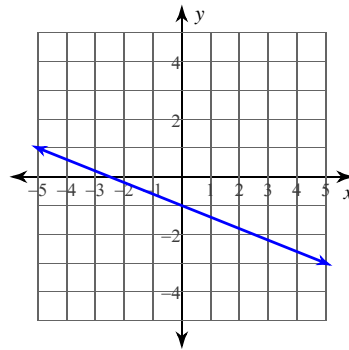
4) $y = x - 3$

Skill #10--Use slope triangle to find the slope of the given line.

5)



6)



Skill #11--Use $m = \frac{y_2 - y_1}{x_2 - x_1}$ to calculate the slope of the line through the two give points.

7) $(5, 0), (-19, -12)$

8) $(6, -7), (10, -4)$

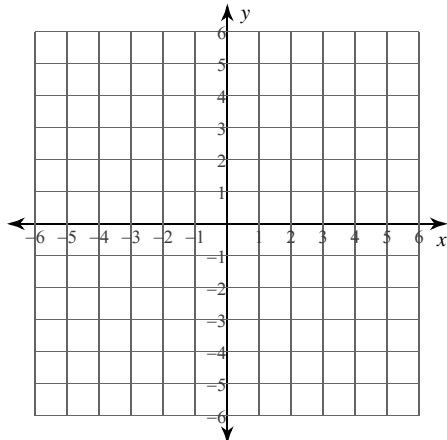
Skill #13--Solve the given proportion.

9) $\frac{7}{2} = -\frac{3}{m}$

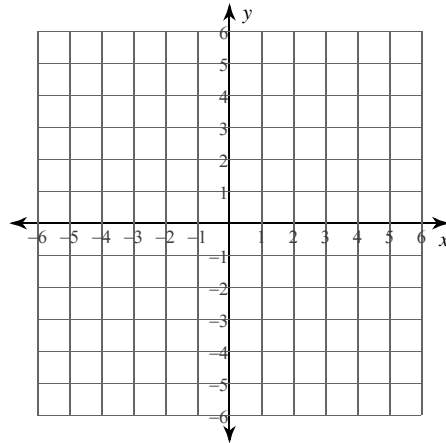
10) $-\frac{3}{6k} = \frac{6}{8}$

Skill #15--Graph the given equations using the starting point and the slope.

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

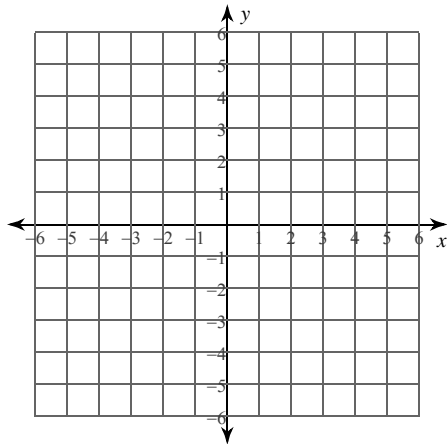


12) $y = x + 2$

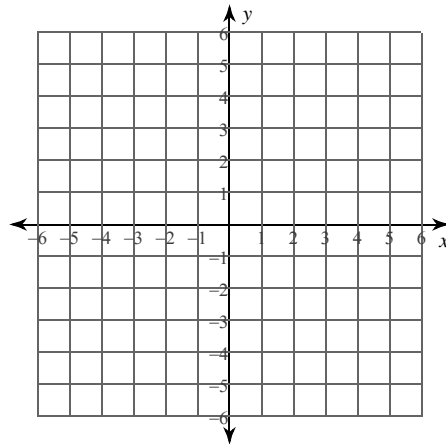


Skill #16--Convert each equation to Slope Intercept form ($y = mx + b$) and then graph using the starting point and the slope.

13) $4x + 3y = -15$

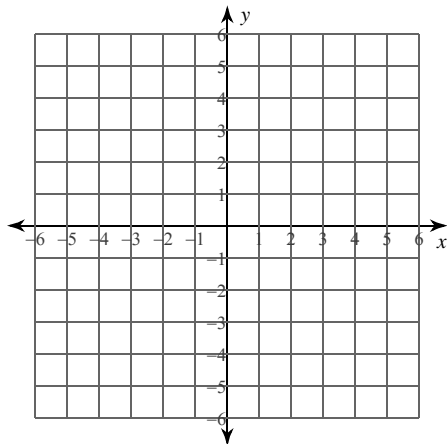


14) $2x + 3y = -9$

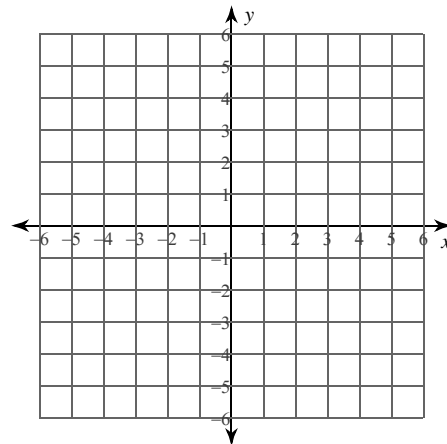


Skill #17--Calculate the 'x' and 'y' intercepts to graph each line.

15) $4x + 3y = -6$

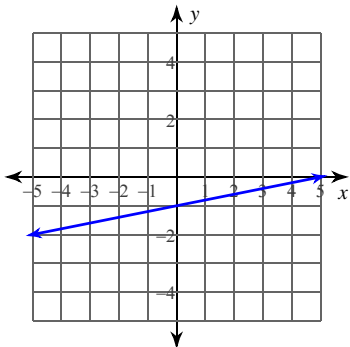


16) $7x - 2y = -8$

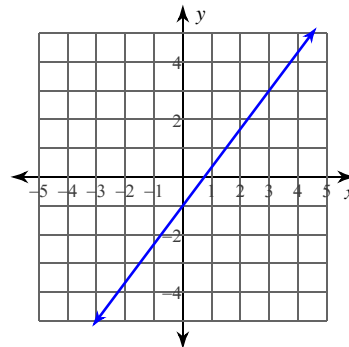


Skill #18--Use the slope and y-intercept to write the equation of the line.

17)



18)



Skill #19--Write the equation of the line from the give slope and y-intercept.

Use: $y = mx + b$

19) Slope = 10, y-intercept = 5

20) Slope = $\frac{5}{2}$, y-intercept = 3

Skill #20--Write the equation of the line using the given point and slope.

Use: $y - y_1 = m(x - x_1)$

21) through: $(-3, -4)$, slope = undefined

22) through: $(2, 2)$, slope = $-\frac{3}{2}$

Skill #21--Write the equation of the line using the given points.

Use: $m = \frac{y_2 - y_1}{x_2 - x_1}$ and $y - y_1 = m(x - x_1)$

23) through: $(-3, -1)$ and $(0, 4)$

24) through: $(0, -4)$ and $(4, 4)$

Skill #22--Convert the given equation to Slope-Intercept Form. $y = mx + b$

25) $y + 3 = -(x - 1)$

26) $y + 1 = \frac{1}{4}(x + 4)$

Skill #24--Use Substitution to solve the system of equations.

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

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

29) **Skill #25--Solve the give Systems Word Problem**

Mike and Imani are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of shiny wrapping paper. Mike sold 5 rolls of plain wrapping paper and 8 rolls of shiny wrapping paper for a total of \$172. Imani sold 5 rolls of plain wrapping paper and 6 rolls of shiny wrapping paper for a total of \$134. What is the cost each of one roll of plain wrapping paper and one roll of shiny wrapping paper?

Skill #26--Solving Multi-Step Equations.

Solve for the given variable.

30) $7v + 3 + 4 = 21$

31) $7x + 3x = 10$

Skill #27--Variables on Both Sides.

Solve the the given variable.

32) $2r + 6 = r + 7$

33) $-6 - 3a + 4 = 6 - a$

Skill #28--Solving Equations with Variables.
Solve for the given variable.

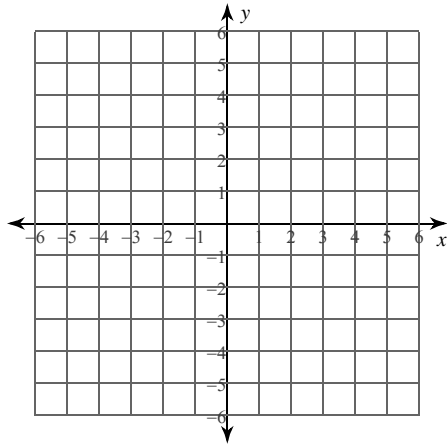
34) $110 = 3(4 + 7k) - 7$

35) $7x - 8(2 + 2x) = -88$

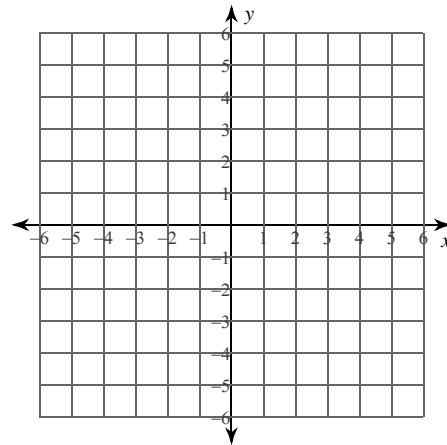
Skill #29--Graphing Linear Inequalities.

Graph and Shade each Inequality. (Don't forget the difference between dotted and solid).

36) $y \leq \frac{1}{4}x + 1$



37) $y > 4x - 1$



Skill #30--Box and Whisker Plot

Draw the box and whisker plot using the Median, Q1, Q3, high value and low value.

- 38) Hits in a Round of Hacky Sack
 2 3 4 6 6 6 12
 13 15 22

- 39) Goals in a Hockey Game
 3 5 5 5 5 6 6 7
 7 9 9