

Show your work

Box Your Answers

Calculators Allowed

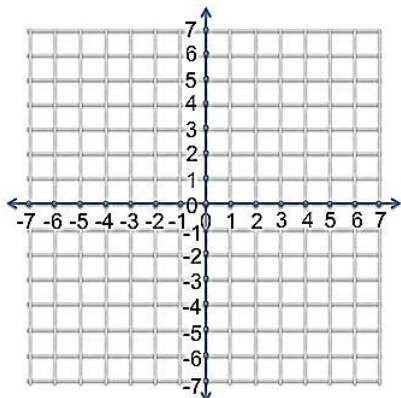
Simplify All Fractions

Graph the following equations. Identify which form the equation is in (slope y-intercept, standard, point-slope, or neither). Make a table of at least 5 inputs and outputs (x-values and y-values). Identify the x- and y-intercepts (these might not be whole numbers. If they aren't whole numbers, give them to the nearest tenth or as a reduced fraction).

1) $y = 3x - 4$ Form: _____

2) $y = -x + 2$ Form: _____

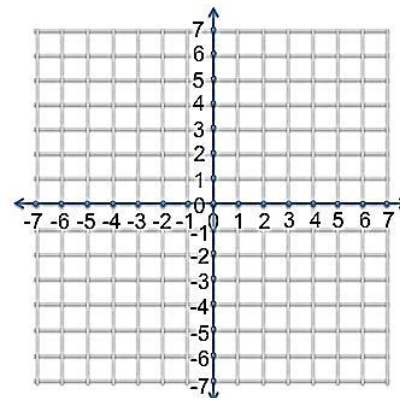
x	y



x - int:

y - int:

x	y



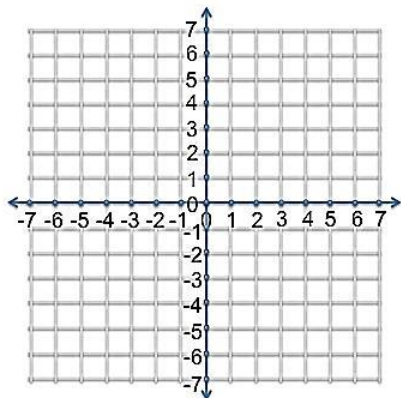
x - int:

y - int:

3) $y = -\frac{2}{3}x + 6$ Form: _____

4) $y = 7$ Form: _____

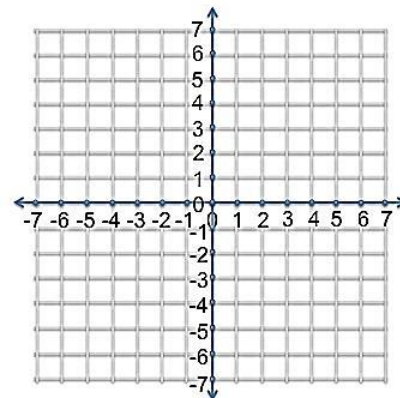
X	y



x-int:

y-int:

x	y



x-int:

y - int:

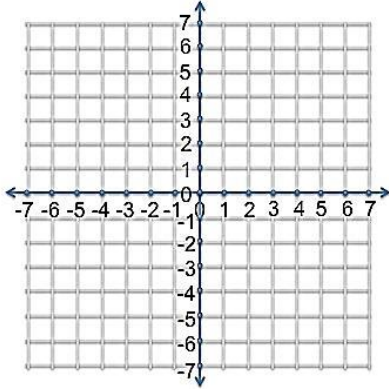
5) Give the equation of a line parallel to $y = \frac{3}{4}x + 10$ that contains the point $(-2, 5)$. It can be written in any form.

Graph the following equations. The directions are the same as #1-4 from the previous page.

6) $5x - 2y = 10$ Form: _____

7) $y - 4 = \frac{2}{3}(x + 5)$ Form: _____

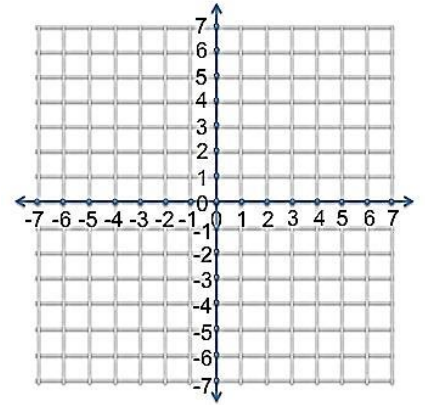
x	y



x-int:

y-int:

X	y



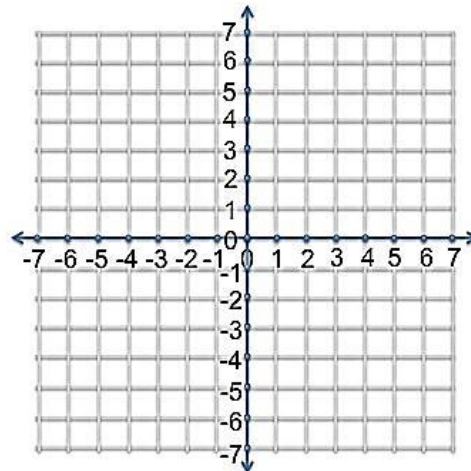
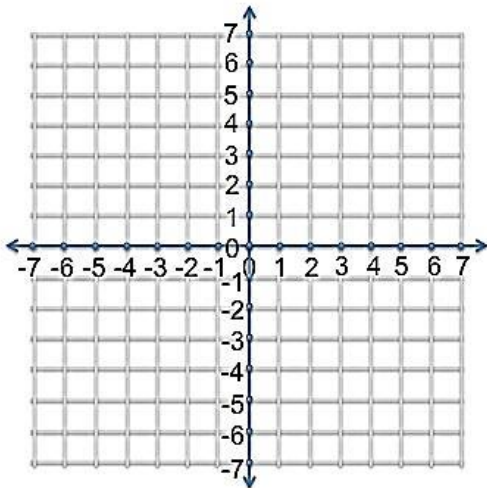
x - int:

y - int:

Graph and shade the linear inequalities. (Hint: Double-check whether you want a solid or a dashed line!)

8) $y > -3x + 5$

9) $2x - 4y < 12$



For questions 10 -12, determine whether the lines through each pair of points are **parallel, perpendicular, or neither**.

10) $(-1, -3)$ and $(2, -8)$; $(8, -7)$ and $(9, 10)$

11) $(0, -4)$ and $(5, -1)$; $(-6, 8)$ and $(3, -7)$

12) $(5, 4)$ and $(9, 7)$; $(-6, 0)$ and $(-2, 3)$

14a) Write the equation of the line passing through $(4, -7)$ and parallel to the line whose equation is $3x + y = 9$. You may write the equation in any form (i.e. slope-intercept, point-slope, standard form, but point-slope is recommended).

14b) Change the word "parallel" to "perpendicular" in the above problem, and complete it.

15a) Write the equation of the line passing through $(4, -7)$ and *parallel* to the line whose equation is $3x + 4y = 9$. You may write the equation in any form (i.e. slope-intercept, point-slope, standard form).

15b) Change the word "parallel" to "perpendicular" in the above problem, and complete it.