BECA / Dr. Huson / Regents Prep: Graphs First and last name:
21 October 2024 Section:

1.2 Do Now: Graphing lines and finding intersections

1. Graph and label the two equations. Mark their intersection as an ordered pair.

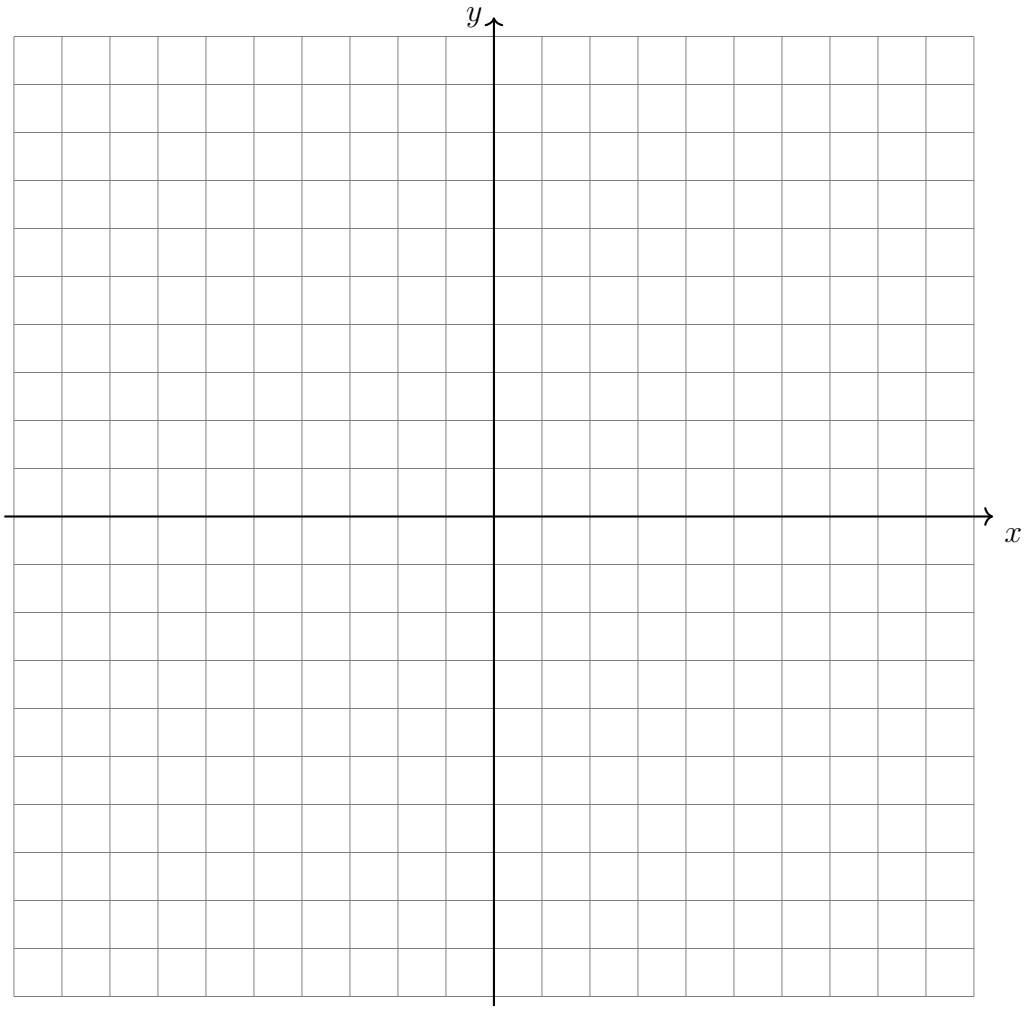
$y = x - 4$

Complete the table

x	y
0	____
2	____
____	0

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

x	y
-2	6
0	5
2	4
6	2
10	0



The distributive property of multiplication over addition

2. Simplify each expression. (use fractions, not decimals)

   (a) $\frac{1}{7} + \frac{3}{7}$

   (c) $\frac{5}{3} - \frac{1}{6}$

   (b) $4(\frac{1}{4}x + 2)$

   (d) $\frac{2}{3}(6x + 15)$

Solve each equation twice, for (a) first distribute, and for (b)multiply both sides of the equation by the fraction's denominator first.

	Distribute first	Multiply by the denominator first
3.	(a) $\frac{1}{5}(x + 8) = 2$	(b) $\frac{1}{5}(x + 8) = 2$
4.	(a) $\frac{1}{6}(6x + 18) = 11$	(b) $\frac{1}{6}(6x + 18) = 11$

5. Write down a rule for under what conditions is it more efficient to first distribute versus multiply by the denominator when solving an algebra equation.