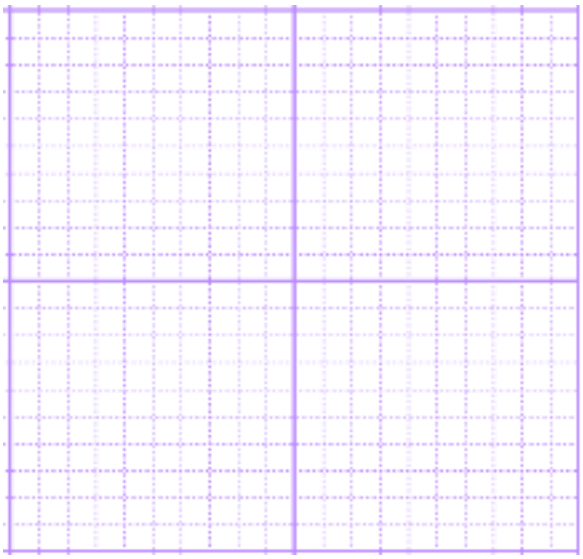
Graph each equation to find the point of intersection. P Name_____
Remember to find a **nice starting point**, then use **the slope** to find other nice points.

Problem 1

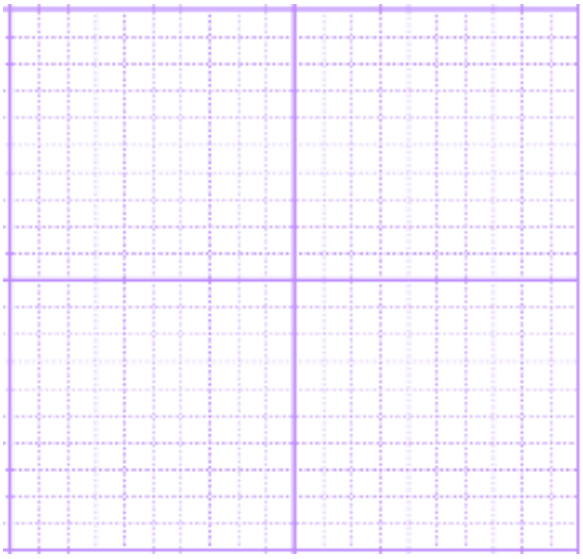


$y = \frac{1}{2}x + 1$

$3x - y = 9$

Pt of Intersection _____

Problem 2

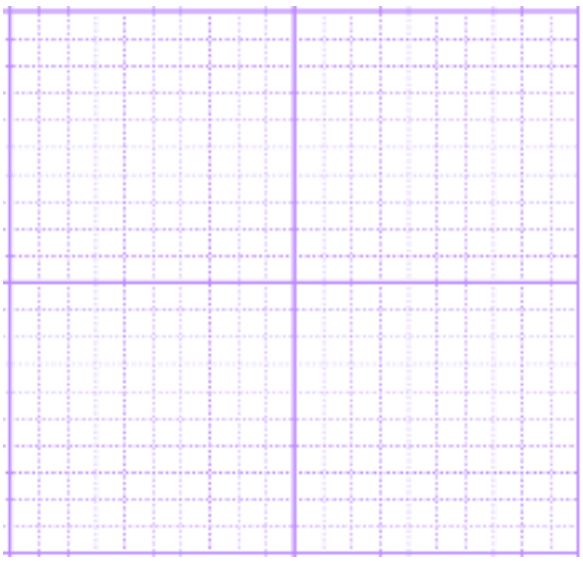


$2x + 3y = 10$

$y = \frac{3}{2}x - 1$

Pt of Intersection _____

Problem 3

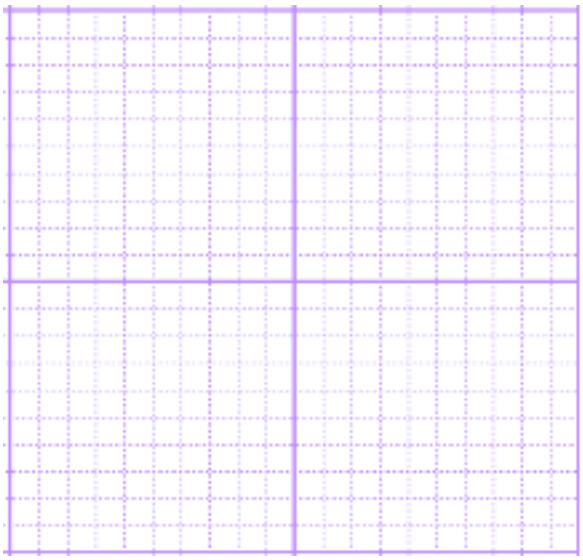


$3x + 4y = 6$

$y = \frac{5}{2}x + 8$

Pt of Intersection _____

Problem 4

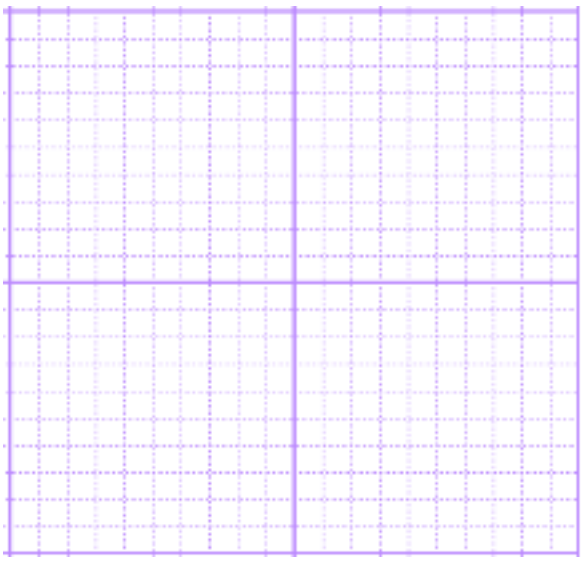


$y = \frac{1}{2}x - 5$

$3x - 2y = 18$

Pt of Intersection _____

Problem 5

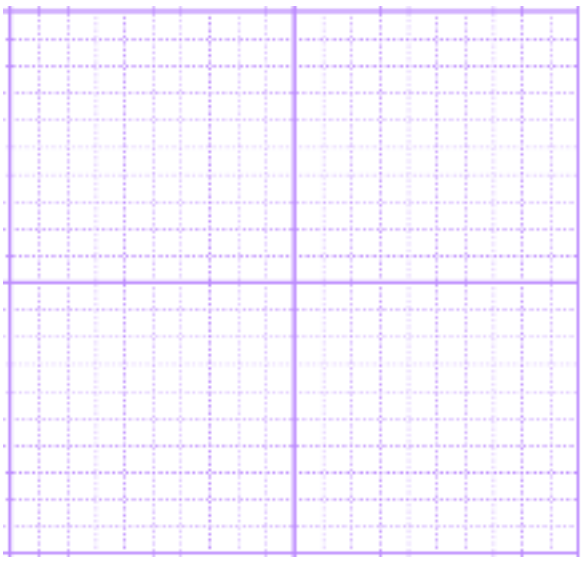


$y = \frac{-2}{3}x - 6$

$x + 2y = -10$

Pt of Intersection _____

Problem 6

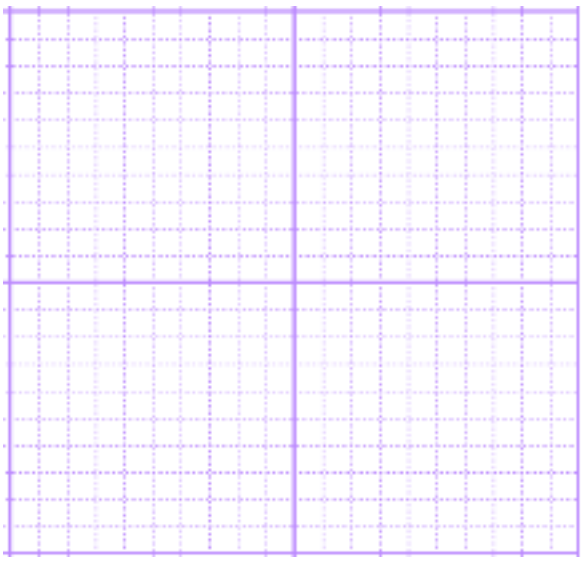


$y = \frac{-5}{3}x + 4$

$3x - y = 22$

Pt of Intersection _____

Problem 7



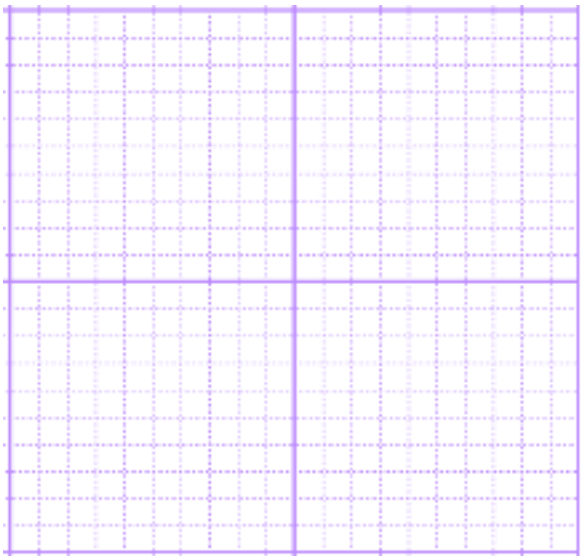
$2x - y = 9$

Pt of Intersection _____

Pt of Intersection _____

$y = \frac{-2}{5}x + 3$

Problem 8



$y = \frac{2}{3}x + 6$

$x + 2y = 5$

Pt of Intersection _____

Solve each system of equations using **substitution.**

Problem 9

$y = \frac{2}{3}x + \frac{4}{3}$

x + 3y = 7 Pt of Intersection _____

Problem 10

x – 3y = 5

3x + 2y = 4 Pt of Intersection _____

Problem 11

5x + y = 4

x – 2y = 3 Pt of Intersection _____

Problem 12

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

2x + 5y = –4 Pt of Intersection _____

Problem 13

–2x + y = 1

4x + 3y = 23 Pt of Intersection _____

Problem 14

2x – 3y = –4

x + 3y = 7 Pt of Intersection _____

Problem 15

x + y = 8

2x – y = 6 Pt of Intersection _____

Problem 16

– x + y = – 4

2x – 5y = 2 Pt of Intersection _____

Problem 17

x – y = 3

5x + y = – 15 Pt of Intersection _____

Problem 18

x = 2y + 9

y = 2x – 3 Pt of Intersection _____

Solve each system of equations using **Linear Combination / Elimination.**

Problem 19
$5x - y = -6$
$x - y = -2$ Pt of Intersection _____

Problem 20
$x + 4y = 30$
$2x - y = -6$ Pt of Intersection _____

Problem 21
$x - y = 3$
$5x + y = -15$ Pt of Intersection _____

Problem 22
$x = 3y + 5$
$2y + 3x = 4$ Pt of Intersection _____

Problem 23
$x + y = 8$
$2x - y = 6$ Pt of Intersection _____

Problem 24
$-x + y = -4$
$2x - 5y = 2$ Pt of Intersection _____

Problem 25
$x - y = 3$
$5x + y = -15$ Pt of Intersection _____

Problem 26
$x = 2y + 9$
$y = 2x - 3$ Pt of Intersection _____

Problem 27
$y = 3x - 1$
$x + y = 3$ Pt of Intersection _____

Problem 28
$x + y = 8$
$2x - y = 6$ Pt of Intersection _____

Solve each system of equations using **Cramer's Rule.**

Problem 29
$y = -x + 2$
$2x - y = 1$ Pt of Intersection _____

Problem 30
$x - y = 2$
$3y + 2x = 9$ Pt of Intersection _____

Problem 31
$y = x - 4$
$2x - 5y = 2$ Pt of Intersection _____

Problem 32
$2x + 3y = 8$
$3x + y = 5$ Pt of Intersection _____

Problem 33
$2x + 3y = 6$
$x + 2y = 1$ Pt of Intersection _____

Problem 34
$x + y = 8$
$2x - y = 6$ Pt of Intersection _____

Problem 35
$-x + y = -4$
$2x - 5y = 2$ Pt of Intersection _____

Problem 36
$x - y = 3$
$5x + y = -15$ Pt of Intersection _____

Problem 37
$x = 2y + 9$
$y = 2x - 3$ Pt of Intersection _____

Solve each system with the **method of your choosing**.

Problem 38
y = 3x + 5
x + 2y = 1 Pt of Intersection _____

Problem 39
2x – 3y = 9
5x + 2y = –4 Pt of Intersection _____

Problem 40
4x – 5y = 10
3x + y = 9 Pt of Intersection _____

Problem 41
6x + 3y = 5
x + 4y = 9 Pt of Intersection _____

Problem 38
$y = \frac{2}{3}x - 5$
x + 2y = 11 Pt of Intersection _____

Problem 39
$y = -\frac{4}{3}x - 5$
x + y = –6 Pt of Intersection _____

Problem 40
x – 2y = 5
3x + y = 2 Pt of Intersection _____

Problem 41
x + 3y = 5
x + 4y = 3 Pt of Intersection _____

Problem 38
y = 3x + 5
x + 4y = 6 Pt of Intersection _____