

Section 6.1 – Solving by Graphing and Substitution

Problem Set 1

Find the coordinates of the points where the following pairs of lines intersect.

1. $y = -x$ and $y = 4x + 9$

2. $y = 3x + 6$ and $y = -3x + 24$

3. $x = y - 2$ and $y = 5x + 4$

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

5. $3x + y = 8$ and $-x - y = 4$

6. $4y + x = 2$ and $4y - x = 2$

7. $4x + 2 = 3$ and $y = 5$

8. $\frac{4x}{6} + \frac{3y}{4} = \frac{13}{6}$ and $\frac{x}{7} - \frac{3y}{4} = \frac{19}{14}$

9. $4x + y = 6$ and $4x + y = 7$

10. $x + y = 0$ and $4x + 3y = 2$

11. $\frac{x}{5} + \frac{4y}{9} = \frac{14}{15}$ and $\frac{x}{7} - \frac{3y}{6} = -\frac{25}{14}$

12. $x + 3y = 2$ and $-3x - 9y = -3$

13. $x + 6y = 5$ and $4x + 16y - 12 = 0$

14. $4x + 3y = 0$ and $-\frac{x}{9} + \frac{5y}{18} = 0$