

Intermediate Algebra Skill

Identifying Parallel and Perpendicular Lines

Use the Slopes to determine whether or not the given lines are parallel, perpendicular or neither:

1) $y = 6x - 8$ and $12x = 2y + 5$

2) $x = -4y + 19$ and $20y = -5x - 12$

3) $x - y = 5$ and $y - x = 1$

4) $x - 3y = 2$ and $3y - x = 1$

5) $3x + 6y = 10$ and $6x - 3y = 8$

6) $-4x + 4y = 9$ and $-14x - 8y = -3$

7) $2 - 5y = x$ and $2y - 5 = x$

8) $-4 + 6y = 9x$ and $4y - 6x = 9$

9) $x + 6 = y$ and $y - x = -2$

10) $y + 3 = 5x$ and $3x - y = -2$

11) $y = 3x + 9$ and $2y = 6x - 2$

12) $y = 4x - 5$ and $4y = 8 - x$

Answers to Identifying Parallel and Perpendicular Lines

- 1) parallel
- 2) parallel
- 3) parallel
- 4) parallel
- 5) perpendicular
- 6) perpendicular
- 7) neither
- 8) neither
- 9) parallel
- 10) neither
- 11) parallel
- 12) perpendicular