

NAME: _____

HW 3.3 – PARALLEL & PERPENDICULAR
DAY 2

DATE: _____

ALGEBRA 1A

State whether the given lines are parallel, perpendicular, or neither.

Solve for y if necessary.

1. $y = x - 3$
 $y = -x + 4$

2. $y = 2x - 8$
 $-2x + y = 7$

3. $y = -\frac{2}{3}x + 7$
 $2x + 3y = 1$

4. $y = -\frac{1}{2}x + 4$
 $x - 2y = 5$

5. $y = \frac{5}{2}x - 6$
 $y = -\frac{2}{5}x + 6$

6. $6y = -2x + 6$
 $3y = -x + 9$

7. $y = x$
 $y = 5$

8. $y = -5$
 $x - 4 = 6$

9.
$$\begin{aligned} 4x - y &= 8 \\ x + 4y &= 3 \end{aligned}$$

10.
$$\begin{aligned} 4x + 4y &= 28 \\ 3x + 3y &= 21 \end{aligned}$$

In each of the following sets, select the one equation whose graph would not be parallel to the other two:

11. $\{y - 6x = 3, 2y = 12x, x = 6y\}$

12. $\{4x - y = 2, y + 4x = 2, 4x - y = 2\}$

13. $\{3x + y = 8, 2y = 8 - 6x, x - 3y = 8\}$

In each of the following sets, select the one equation whose graph would not be perpendicular to the given equation:

14. $y = -\frac{3}{5}x + 1$ $\{3y = 5x + 6, y = -\frac{5}{3}x + 1\}$

15. $2y - x = 0$ $\{y = -2x, y = -\frac{1}{2}x\}$

16. $y + 5x = 4$ $\{y = -5x, y = \frac{1}{5}x + 4\}$