

NAME: \_\_\_\_\_

1. Determine whether the graph of  $-4y = -x + 5$  and  $-16x - 4y = 9$  are perpendicular lines.
2. Determine whether the graph of  $-y = 3x + 11$  and  $-2x - 6y = 3$  are perpendicular lines.
3. Determine whether the graph of  $3y = 4x + 14$  and  $9x + 12y = 6$  are perpendicular lines.
4. Determine whether the graph of  $-y = 2x + 9$  and  $-2x + 4y = 7$  are perpendicular lines.
5. Determine whether the graph of  $4y = 5x + 7$  and  $12x - 15y = 10$  are perpendicular lines.
6. Determine whether the graph of  $3y = -4x + 6$  and  $6x - 8y = 5$  are perpendicular lines.
7. Determine whether the graph of  $2y = 3x + 12$  and  $6x + 9y = 14$  are perpendicular lines.
8. Determine whether the graph of  $-4y = x + 13$  and  $-12x + 3y = 13$  are perpendicular lines.
9. Which of the lines is not perpendicular to  $2x + y = 8$ ?

[A]  $2y - x = 4$

[B]  $x - 2y = 3$

[C]  $2x - y = 4$

[D]  $y - \frac{x}{2} = 6$

10. Compare the quantities in Column A and Column B.

Column A

Column B

the slope of a line parallel to

the slope of a line perpendicular to

the line with the equation  $x - 2y = 1$

the line with equation  $2x + y = -1$

[A] The quantity in Column A is greater.

[B] The quantity in Column B is greater.

[C] The quantities are equal.

[D] The relationship cannot be determined from the information given.

- [1] The lines are perpendicular.
- [2] The lines are not perpendicular.
- [3] The lines are perpendicular.
- [4] The lines are perpendicular.
- [5] The lines are not perpendicular.
- [6] The lines are perpendicular.
- [7] The lines are perpendicular.
- [8] The lines are perpendicular.
- [9] C
- [10] C