

NAME: _____

P.I. A.A.38: Determine if two lines are parallel, given their equations in any form

P.I. G.G.63: Determine whether two lines are parallel, given their equations

1. Find the pair of parallel lines.

(1) $-12y + 15x = -4$

(2) $4y = -5x - 4$

(3) $15x + 12y = -4$

2. Find the pair of parallel lines.

(1) $2y = -4x + 6$

(2) $32x + 16y = 6$

(3) $-16y + 32x = 6$

3. Find the pair of parallel lines.

(1) $-3y = 2x + 5$

(2) $-6y + 4x = 5$

(3) $4x + 6y = 5$

4. Which of the following equations has a graph that is parallel to the graph of $4x - 2y = 7$?

[A] $4x + 2y = 2$ [B] $-2y = 4x + 2$

[C] $7 - 4x = 2y$ [D] $2y = 4x + 7$

[E] $-4x - 2y = -7$

5. Which of the following lines is *not* parallel to $y = 4x + 5$?

[A] $y - 4x = 2$ [B] $4x - y = 6$

[C] $8x - 2y = 6$ [D] $4x + y = 5$

6. Which of the following lines is *not* parallel to $y = 2x + 1$?

[A] $4x - 2y = -4$ [B] $2y - x = -4$

[C] $y - 2x = 6$ [D] $2x - y = -4$

7. Which of the following lines is *not* parallel to $y = 5x - 2$?

[A] $y = x - 2$ [B] $5x - y = 1$

[C] $y - 5x = 1$ [D] $10x - 2y = 1$

8. Find the pair of parallel lines.

(1) $-15y - 20x = 2$

(2) $3y = 4x + 2$

(3) $-20x + 15y = 2$

[A] (1) and (2) [B] (1) and (3)

[C] (2) and (3)

[D] There are no parallel lines.

9. Find the pair of parallel lines.

(1) $-8x - 8y = -1$

(2) $y = -x - 1$

(3) $8y - 8x = -1$

[A] (1) and (3) [B] (2) and (3)

[C] (1) and (2)

[D] There are no parallel lines.

10. Find the pair of parallel lines.

(1) $-14y + 21x = 5$

(2) $21x + 14y = 5$

(3) $2y = -3x + 5$

[A] (1) and (3) [B] (2) and (3)

[C] (1) and (2)

[D] There are no parallel lines.

- [1] (2) and (3) _____
- [2] (1) and (2) _____
- [3] (1) and (3) _____
- [4] D _____
- [5] D _____
- [6] B _____
- [7] A _____
- [8] C _____
- [9] C _____
- [10] B _____