

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

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