

# Finding Slope of Parallel and Perpendicular lines

1. Find the slope to determine whether the given lines are 'Parallel' or 'Perpendicular'.

**a**  $y = 6x + 7$  and  $y = 6x - 3$

**b**  $y + \frac{5}{2} = -3x$  and  $-\frac{1}{3}x + y = 7$

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**c**  $y - 1 = x$  and  $y = -x + 9$

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**d**  $5 = x - y$  and  $x + 7 = y$

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**e**  $y = 2x - 6$  and  $y + 6 = -\frac{1}{2}x$

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**f**  $5x + 4y = 12$  and  $5y - 4x = 55$

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2. Find the slope of a line parallel to the given one.

**a**  $22x + \frac{4}{7}y = 7$

**b**  $y - 5x + 8 = 0$

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**c**  $2y - 16 = x$

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**d**  $2x + 3y = 10$

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# Finding Slope of Parallel and Perpendicular lines

1.

Answers

**a**  $y = 6x + 7$  and  $y = 6x - 3$

**b**  $y + \frac{5}{2} = -3x$  and  $-\frac{1}{3}x + y = 7$

Parallel

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**c**  $y - 1 = x$  and  $y = -x + 9$

Perpendicular

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**d**  $5 = x - y$  and  $x + 7 = y$

Perpendicular

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**e**  $y = 2x - 6$  and  $y + 6 = -\frac{1}{2}x$

Parallel

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**f**  $5x + 4y = 12$  and  $5y - 4x = 55$

Perpendicular

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2.

**a**  $22x + \frac{4}{7}y = 7$

**b**  $y - 5x + 8 = 0$

$-\frac{77}{2}$

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**c**  $2y - 16 = x$

5

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**d**  $2x + 3y = 10$

$\frac{1}{2}$

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$-\frac{2}{3}$

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