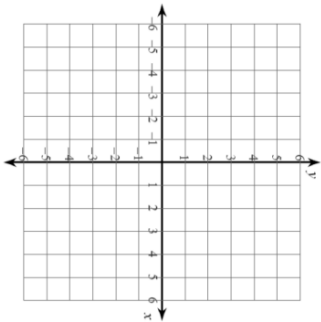


Parallel lines are

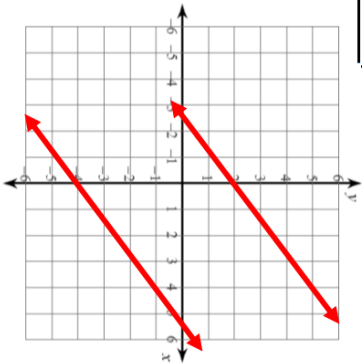
Perpendicular lines

Vertical lines

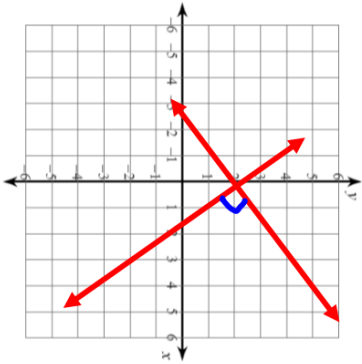


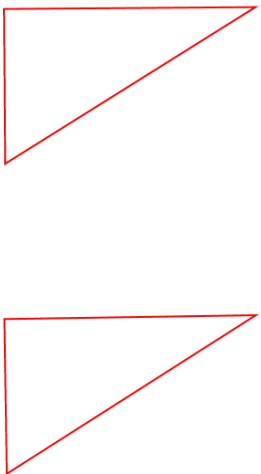
Horizontal lines

Nonvertical lines are parallel if and only if they have the _____.



Nonvertical lines are perpendicular if and only if the _____ of their slopes is _____.





Slope-intercept form

$y =$

m is

b is

x and y are

Slope formula

Identify which lines are parallel.

$$y = 5 \quad y = 5x + 4 \quad y = 5x + 7 \quad y = -7$$

Identify which lines are perpendicular.

$$y = \frac{2}{5}x - 4 \quad y = \frac{2}{5} \quad x = \frac{2}{5} \quad y = -\frac{5}{2}x$$

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

Line 1: $(-2, 2), (-6, -2)$

Line 2: $(3, 0), (9, 5)$

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

Line 1: $(2, 1), (8, 5)$

Line 2: $(7, 0), (3, 6)$

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

Line 1: $(9, 3), (-5, 7)$

Line 2: $(-11, 6), (-7, 2)$