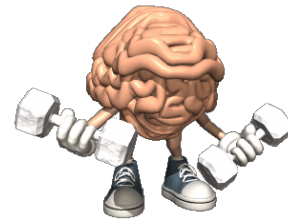
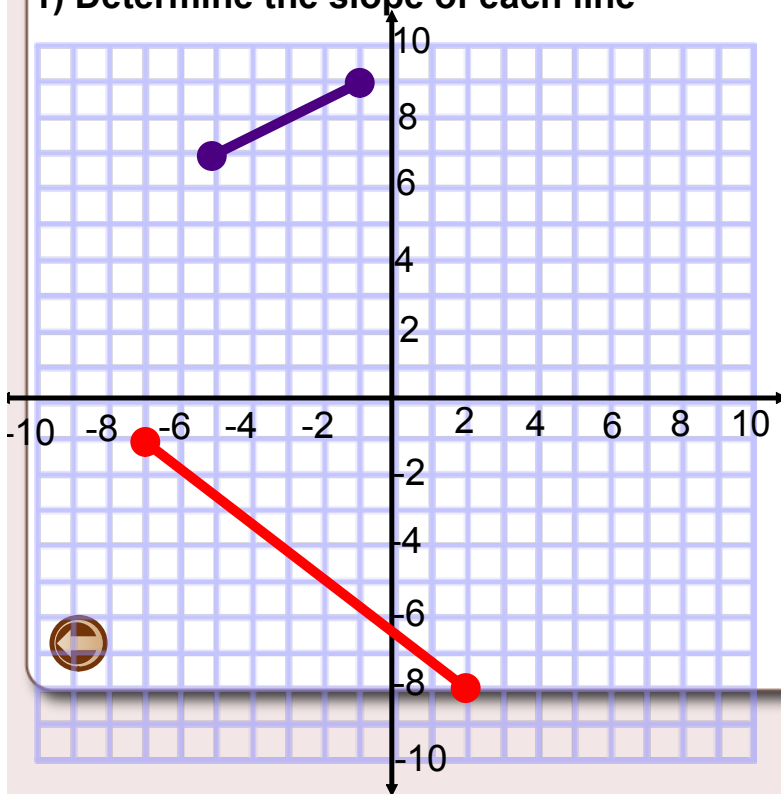


# Warm Up



1) Determine the slope of each line



2) What is the slope of a line with points  $(-5, 7)$  and  $(-2, -9)$  ?

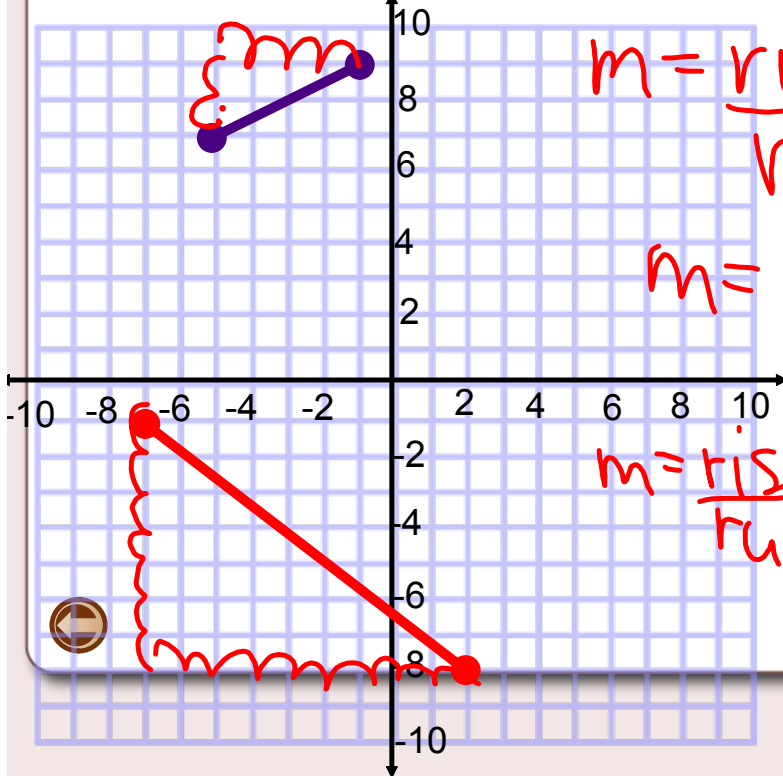
3) If  $m = -3$  and  $\text{run} = 5$  what is the rise equal to ?

4) If  $m = 8$  and  $\text{rise} = 24$  what is the run equal to ?

# Warm Up



1) Determine the slope of each line



$$m = \frac{\text{rise}}{\text{run}}$$

$$m = \frac{2}{4} = \frac{1}{2}$$

$$m = \frac{\text{rise}}{\text{run}} = \frac{-7}{9}$$

2) What is the slope of a line with points  $(-5, 7)$  and  $(-2, -9)$ ?

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$(x_2, y_2)$   
 $(-5, 7)$   
 $(x_1, y_1)$   
 $(-2, -9)$   
 $(x, y)$

$$m = \frac{7 - (-9)}{-5 - (-2)} = \frac{16}{-3}$$

$$= -\frac{16}{3}$$

3) If  $m = -3$  and run = 5  
what is the rise equal to ?

$m = \text{slope}$

$m = \frac{\text{rise}}{\text{run}}$

$$-3 = \frac{x \cdot 5 \text{ run}}{5}$$

$$-15 = x$$

$$-3 = -\frac{15}{5}$$

4) If  $m = 8$  and rise = 24  
what is the run equal to ?

$$m = \frac{\text{rise}}{\text{run}}$$

$$8 = \frac{24}{x}$$

$$8 = \frac{24}{3}$$

$$\frac{8x}{8} = \frac{24}{8}$$

$$x = 3$$

## Attachments

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Parallel.doc

Perpendicular and Parallel lines.docx