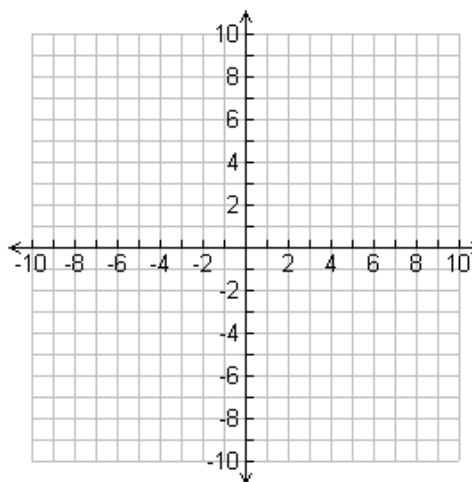


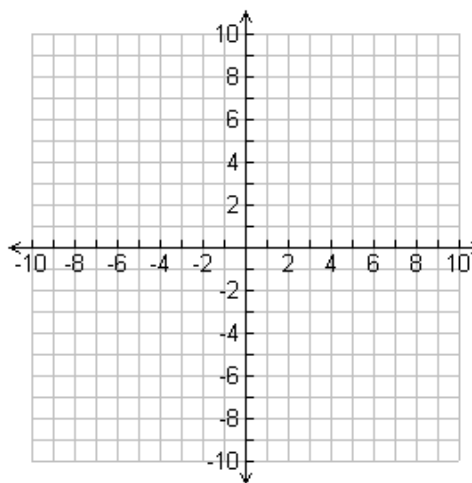
**Geometry**  
**Topic 9: Linear Equations**  
**Introduction Problems**

Parallel Slope	Perpendicular Slope	Standard Form vs Point Slope Form
<p>Find the Parallel Slope for:</p> <p>a) <math>m = 2</math></p> <p>b) <math>m = -3</math></p> <p>c) <math>m = \frac{1}{4}</math></p> <p>d) <math>m = -\frac{1}{5}</math></p>	<p>Find the Perpendicular Slope for:</p> <p>a) <math>m = 2</math></p> <p>b) <math>m = -3</math></p> <p>c) <math>m = \frac{1}{4}</math></p> <p>d) <math>m = -\frac{1}{5}</math></p>	<p><math>y = mx + b</math></p> <p><math>y - y_1 = m(x - x_1)</math></p>

1) Given  $y = 3x + 4$  and  $(6, 8)$   
 What is the line parallel to the given line that intersects the given point?

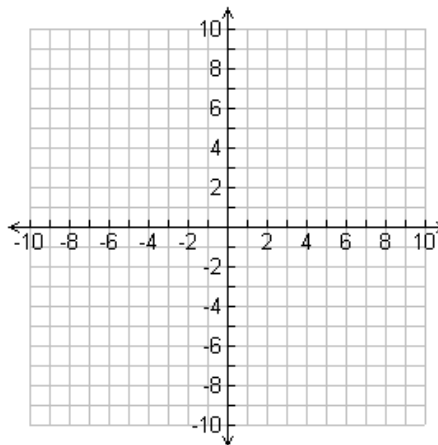


2) Given  $y = 3x + 4$  and  $(6, 8)$   
 What is the line Perpendicular to the given line that intersects the given point?



3) ( 4 , 6 ) and ( 5 , 8 )

What is the line that goes through both points?



4) Given  $y = 2x - 4$  and ( 4 , 6 )

What is the line parallel to the given line that intersects the given point?

5) Given  $y = 2x - 4$  and ( 4 , 6 )

What is the line Perpendicular to the given line that intersects the given point?

6) Given  $y = \frac{1}{2}x + 1$  and ( 2 , 3 )

What is the line parallel to the given line that intersects the given point?

7) Given  $y = \frac{1}{2}x + 1$  and ( 2 , 3 )

What is the line Perpendicular to the given line that intersects the given point?

7) Given ( 2 , 4 ) and ( 6 , 8 )

What is the line that goes through both points?

8) Given ( -2 , 3 ) and ( 4 , 6 )

What is the line that goes through both points?

9) Given ( 1 , -3 ) and ( 2 , 3 )

What is the line that goes through both points?

10) Given ( -2 , -4 ) and ( 2 , -6 )

What is the line that goes through both points?