

**Directions:** Begin your work at the “START!” box. Classify each given scenario as either parallel, perpendicular, or neither.

**START!**

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

parallel

$A(4, 6), B(5, 8)$   
and  
 $C(2, 4), D(4, 8)$

parallel

$A(-2, 3), B(4, -1)$   
and  
 $C(1, 4), D(-2, 6)$

parallel

$A(-2, 6), B(4, -1)$   
and  
 $C(-2, 3), D(5, 9)$

neither

perpendicular

perpendicular

neither

perpendicular

neither

perpendicular

$m = -\frac{1}{2}$   
and  
 $m = 2$

parallel

$A(1, 4), B(5, 2)$   
and  
 $C(1, 5), D(2, 7)$

neither

$y = 3x - 6$   
and  
 $-2x - 6y = 12$

parallel

$y = \frac{1}{2}x + 3$   
and  
 $3x - 6y = 12$

neither

perpendicular

perpendicular

parallel

perpendicular

perpendicular

$A(1, 3), B(4, 6)$   
and  
 $C(-3, 4), D(-2, 5)$

parallel

$m = \text{undefined}$   
and  
 $m = 0$

neither

$-4x + 5y = 20$   
and  
 $y = -\frac{5}{4}x - 3$

perpendicular

**FINISH!**

**PARALLEL, PERP., OR NEITHER**