

- Are these lines PARALLEL, PERPENDICULAR or NEITHER?  
 $2x - 3y = 5$        $3x - 2y = 5$
- Are these lines PARALLEL, PERPENDICULAR or NEITHER?  
 $2x + 3y = 5$        $3x - 2y = 5$
- Are these lines PARALLEL, PERPENDICULAR or NEITHER?  
 $5x - 10y = 1$        $-3x + 6y = 93.6$
- Find the equation of the line parallel to  $4x - 5y = 3$  through  $(4, -2)$
- Find the equation of the line parallel to  $5x + 4y = 1$  through  $(7, 2)$
- Find the equation of the line parallel to  $2x + 5y = 7$  through  $(-3, 6)$
- Find the equation of the line perpendicular to  $4x - 5y = 3$  through  $(4, -2)$
- Find the equation of the line perpendicular to  $5x + 4y = 1$  through  $(7, 2)$
- Find the equation of the line perpendicular to  $2x + 5y = 7$  through  $(-3, 6)$

For #10 – 13 choose answers from

- |             |             |             |              |
|-------------|-------------|-------------|--------------|
| a. $x = 3$  | b. $x = 7$  | c. $x = 9$  | d. $x = 11$  |
| ae. $y = 3$ | be. $y = 7$ | ce. $y = 9$ | de. $y = 11$ |
- Give the equation of the horizontal line through  $(7,9)$ .
  - Give the equation of the vertical line through  $(3,7)$ .
  - Give the equation of the line through  $(7,9)$  perpendicular to  $x = 3$ .
  - Give the equation of the line through  $(9,3)$  parallel to  $x = 7$

**Answers:**

- neither
- perpendicular
- parallel
- $y = 0.8x - 5.2$
- $y = -1.25x + 10.75$
- $y = -0.4x + 4.8$
- $y = -1.25x + 3$
- $y = 0.8x - 3.6$
- $y = 2.5x + 13.5$
- ce
- a
- ce
- c