

October 26, 2015  
 \* Exam #2 - Friday  
 60% New  
 40% Prior

Oct 26-9:54 AM

$(-3, 7)$  & Parallel to  $5x - 3y = 8$   
 $m = \frac{5}{3}$

$5x - 3y = 8$   
 $-3y = -5x + 8$   
 $y = \frac{5}{3}x - \frac{8}{3}$

$y - y_1 = m(x - x_1)$   
 $y - 7 = \frac{5}{3}(x - (-3))$   
 $3(y - 7) = 5(x + 3)$   
 $3y - 21 = 5(x + 3)$   
 $3y - 21 = 5x + 15$   
 $-5x + 3y = 36$   
 Don't leave as a neg!  
 $5x - 3y = -36$

Oct 26-10:04 AM

#20)  $(-2, 4)$  & Parallel to  $y = \frac{3}{2}x + 3$   
 $m = \frac{3}{2}$

$2(y - 4) = 3(x + 2)$   
 $2y - 8 = 3(x + 2)$   
 $2y - 8 = 3x + 6$   
 $3x + 2y = 2$

Oct 26-10:23 AM

Perpendicular lines

$m_2 = -\frac{1}{m_1}$   
 $m_1 = -\frac{8}{5}$   
 $m_2 = \frac{5}{8}$

Oct 26-10:27 AM

#21)  $(2, 4)$  & Perp. to  $y = \frac{2}{7}x - 5$   
 $m = \frac{2}{7}$

$2(y - 4) = \frac{7}{2}(x - 2)$   
 $2y - 8 = 7(x - 2)$   
 $2y - 8 = 7x - 14$   
 $-7x + 2y = -6$   
 $7x - 2y = 6$

Oct 26-10:30 AM

$(-4, 5)$  & Perp. to  $x = 3$

$x + 0y = 3$

$x$	$y$
3	1
3	4
3	-2

$m = \frac{1 - 4}{3 - 3} = -\frac{3}{0}$  und!

$\{(3, 1), (3, 4), (3, -2)\}$

Oct 26-10:36 AM