

5.  $\begin{matrix} X & Y \\ (-1, -5) & (4, -3) \\ x_1 & y_1 & x_2 & y_2 \end{matrix}$

①  $m = \frac{y_2 - y_1}{x_2 - x_1}$   
 $= \frac{(-3) - (-5)}{(4) - (-1)}$   
 $= \frac{-3 + 5}{4 + 1}$   
 $m = \frac{2}{5}$

②  $y = mx + b$   
 $-5 = \frac{2}{5}(-1) + b$   
 $-5 = -\frac{2}{5} + b$   
 $-5 + \frac{2}{5} = b$   
 $-\frac{23}{5} = b$

③  $y = mx + b$   
 $y = \frac{2}{5}x - \frac{23}{5}$

6.  $\begin{matrix} X & Y \\ (3, 0) & (0, -1) \\ x_1 & y_1 & x_2 & y_2 \end{matrix}$

①  $m = \frac{y_2 - y_1}{x_2 - x_1}$   
 $= \frac{(-1) - (0)}{(0) - (3)}$   
 $= \frac{-1}{-3}$   
 $m = \frac{1}{3}$

②  $y = mx + b$   
 $-1 = \frac{1}{3}(0) + b$   
 $-1 = b$

③  $y = mx + b$   
 $y = \frac{1}{3}x - 1$

ex  $(3, 5)$   $(3, 6)$   
 $x = 3$

ex:  $(2, 5)$   $(7, 5)$   
 $y = 5$

7.  $y = \frac{-1}{2}x + 3$   
 $m = -\frac{1}{2}$   
 $y$ -int: 3  
 $(0, 3)$

$m = -\frac{1}{2}$  → DOWN 1  
 → RIGHT 2



$m = \frac{\text{CHANGE IN } Y}{\text{CHANGE IN } X}$   
 POSITIVE #: UP  
 NEGATIVE #: DOWN  
 POSITIVE #: RIGHT  
 NEGATIVE #: LEFT

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

$-\frac{1}{2}$