

MATH 1200 HOME QUIZ #2

1. SEC 2.3 #29. THROUGH  $(-3, -1)$  AND  $(2, 4)$

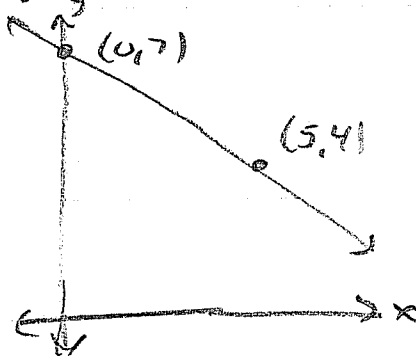
$$m = \frac{4+1}{2+3} = \frac{5}{5} = 1$$

$$\boxed{\begin{aligned} y - 4 &= 1(x - 2) \\ y &= x + 2 \end{aligned}}$$

2. SEC 2.3 #45.  $y = -\frac{3}{5}x + 7$

$$m = -\frac{3}{5}$$

$$y\text{-INT} = 7$$



3. SEC 2.4 #9. THROUGH  $(-2, 2)$  PARALLEL TO  $2x - 3y - 7 = 0$

$$y - 2 = \frac{2}{3}(x + 2)$$

$$y = \frac{2}{3}x + \frac{4}{3} + \frac{6}{3}$$

$$\boxed{y = \frac{2}{3}x + \frac{10}{3}}$$

$$-3y = -2x + 7$$

$$y = \frac{2}{3}x - \frac{7}{3}$$

$$m = \frac{2}{3}$$

4. SEC 2.4 #17. AVERAGE RATE OF CHANGE  $f(x) = \sqrt{x}$  FROM

$$x_1 = 4 \rightarrow x_2 = 9$$

$$AVE = \frac{f(x_2) - f(x_1)}{x_2 - x_1} = \frac{3 - 2}{9 - 4} = \boxed{\frac{1}{5}}$$

5. SEC 2.5 #89.  $g(x) = -|x+4| + 1$

