

$$2. \quad m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\frac{-1}{1} = \frac{3-4}{k-7}$$

$$-1(k-7) = 1(3-4)$$

$$-k+7 = 3-4$$

$$-k = 3-4-7$$

$$\frac{-k}{-1} = \frac{-8}{-1}$$

$$k = 8$$

$$3. \quad m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$= \frac{8 - (-1)}{7 - 2}$$

$$= \frac{8+1}{7-2}$$

$$= \frac{9}{5}$$

$$4. \quad 2(y-1) = 3x+4$$

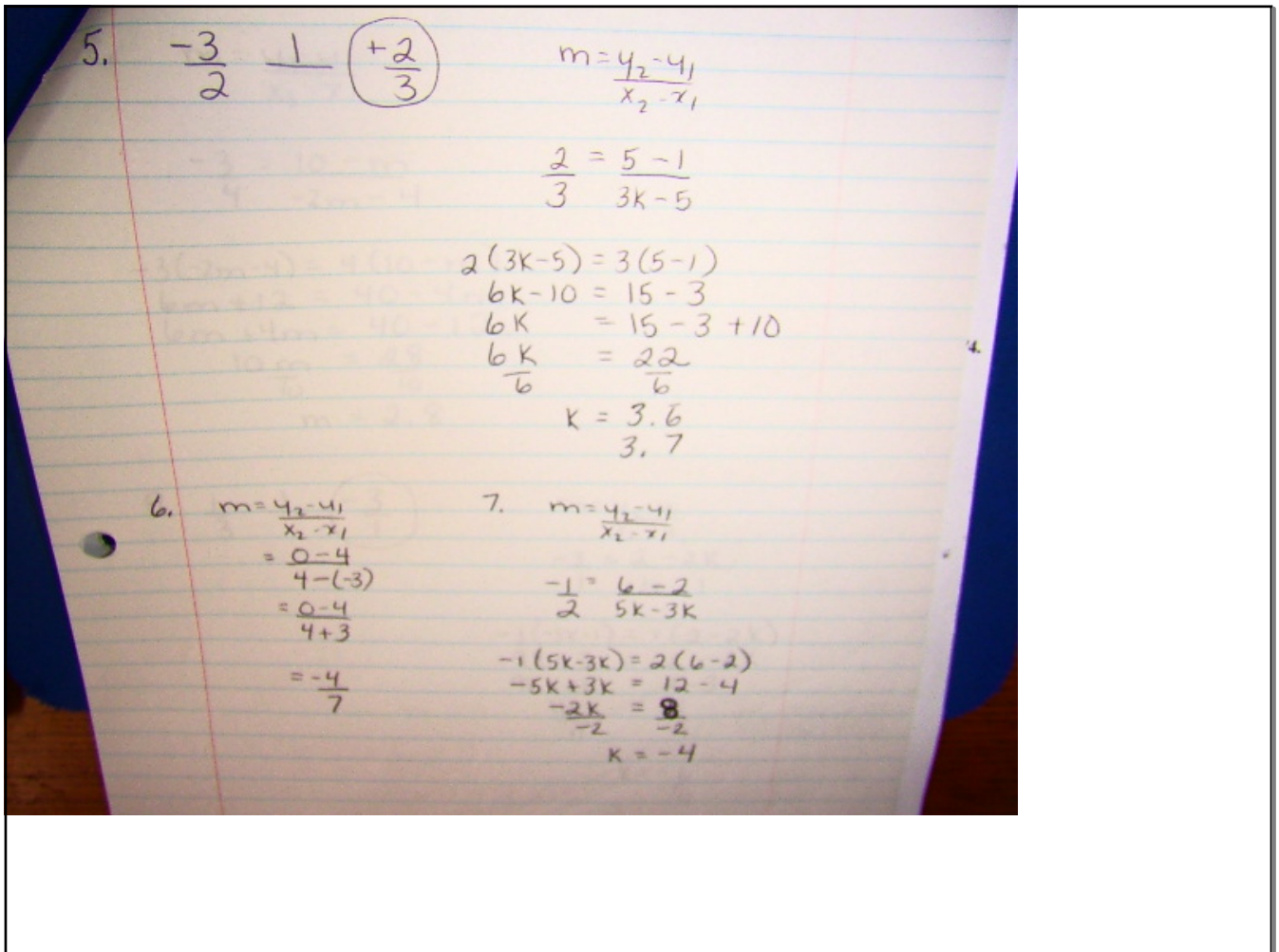
$$2y - 2 = 3x+4$$

$$2y = 3x+4+2$$

$$2y = 3x+6$$

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

$$m = \frac{3}{2} \quad \perp \quad -\frac{2}{3}$$



$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\frac{-3}{4} = \frac{10 - m}{-2m - 4}$$

$$-3(-2m - 4) = 4(10 - m)$$

$$6m + 12 = 40 - 4m$$

$$6m + 4m = 40 - 12$$

$$\frac{10m}{10} = \frac{28}{10}$$

$$m = 2.8$$

9. $\frac{1}{3}$ $\frac{1}{1}$ $\left(\frac{-3}{1}\right)$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\frac{-3}{1} = \frac{2 - 2k}{-3k - 1}$$

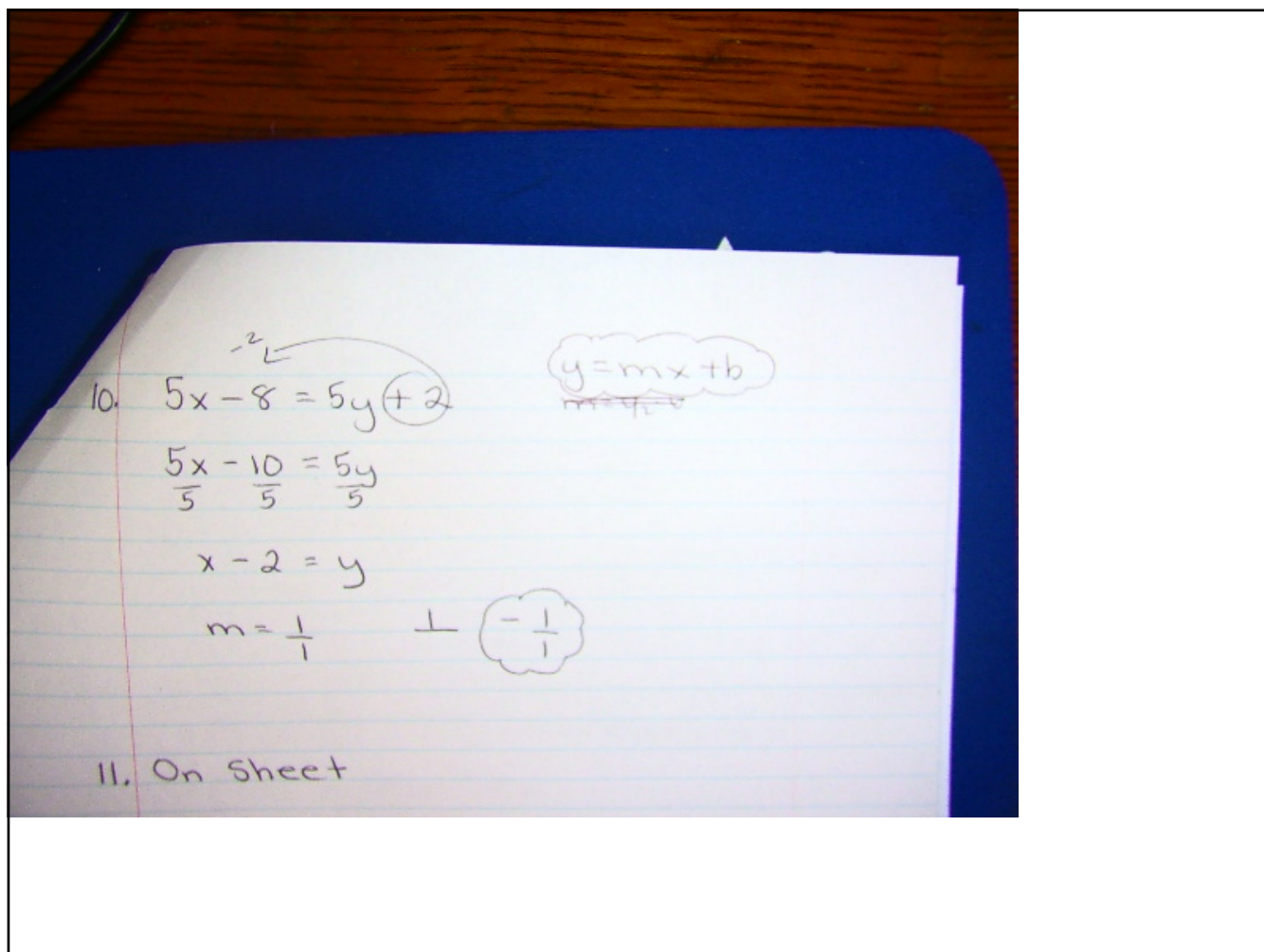
$$-3(-3k - 1) = 1(2 - 2k)$$

$$9k + 3 = 2 - 2k$$

$$9k + 2k = 2 - 3$$

$$\frac{11k}{11} = \frac{-1}{11}$$

$$k = -\frac{1}{11}$$



11. On Sheet

$$12. a) \frac{3}{4}y + 2 = 3x + 2$$

$$3y + 8 = 12x + 8$$

$$\frac{3y}{3} = \frac{12x}{3} + \frac{0}{3}$$

$$y = 4x + 0$$

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

$$y\text{-int} = 0$$

$$b) 3(2y+1) = 7x-9$$

$$6y + 3 = 7x - 9$$

$$6y = 7x - \frac{12}{6}$$

~~$$y = \frac{7x + 5}{6}$$~~

$$y = \frac{7}{6}x - 2$$

$$m = \frac{7}{6}$$

$$y\text{-int} = -2$$