

$$= 2075\$ \text{ Thus, False.}$$

37. Table of monthly income in July: each income doubles + increases by 200.

(y _i) Income (July)	2200	3200	6200	10200	20200	Total
(n _i) n _i of educators	70	90	20	10	10	200

$$\text{let new average be } \bar{y} = \frac{\sum_{i=1}^4 y_i n_i}{N}$$

$$= \frac{20200(10) + 2200(70) + 3200(90) + 6200(20) + 10200(10)}{200}$$

$$= 4350\$.$$

3rd exercise:

1a) Drawn.

b) A+B belongs to (d) if coordinates of A+B satisfy eqn of (d).

$$(d): 5x + 3y + 14 = 0$$

- For A(-4; 2)

$$5(-4) + 3(2) + 14 \stackrel{?}{=} 0$$

$$-20 + 6 + 14 \stackrel{?}{=} 0$$

$$0 = 0 \checkmark$$

Thus, A belongs to (d)

For B(-1; -3)

$$5(-1) + 3(-3) + 14 \stackrel{?}{=} 0$$

$$-5 - 9 + 14 \stackrel{?}{=} 0$$

$$0 = 0 \checkmark$$

Thus, B belongs to (d).

c) Drawn.

$$2) (AC): \frac{y - y_c}{x - x_c} = \frac{y_A - y_c}{x_A - x_c} \quad (AC): \frac{y - 5}{x - 1} = \frac{-3}{-5} \quad (AC): y = \frac{3x}{5} + \frac{22}{5}$$

$$\frac{y - 5}{x - 1} = \frac{2 - 5}{-4 - 1}$$

$$y - 5 = \frac{3}{5}(x - 1)$$

