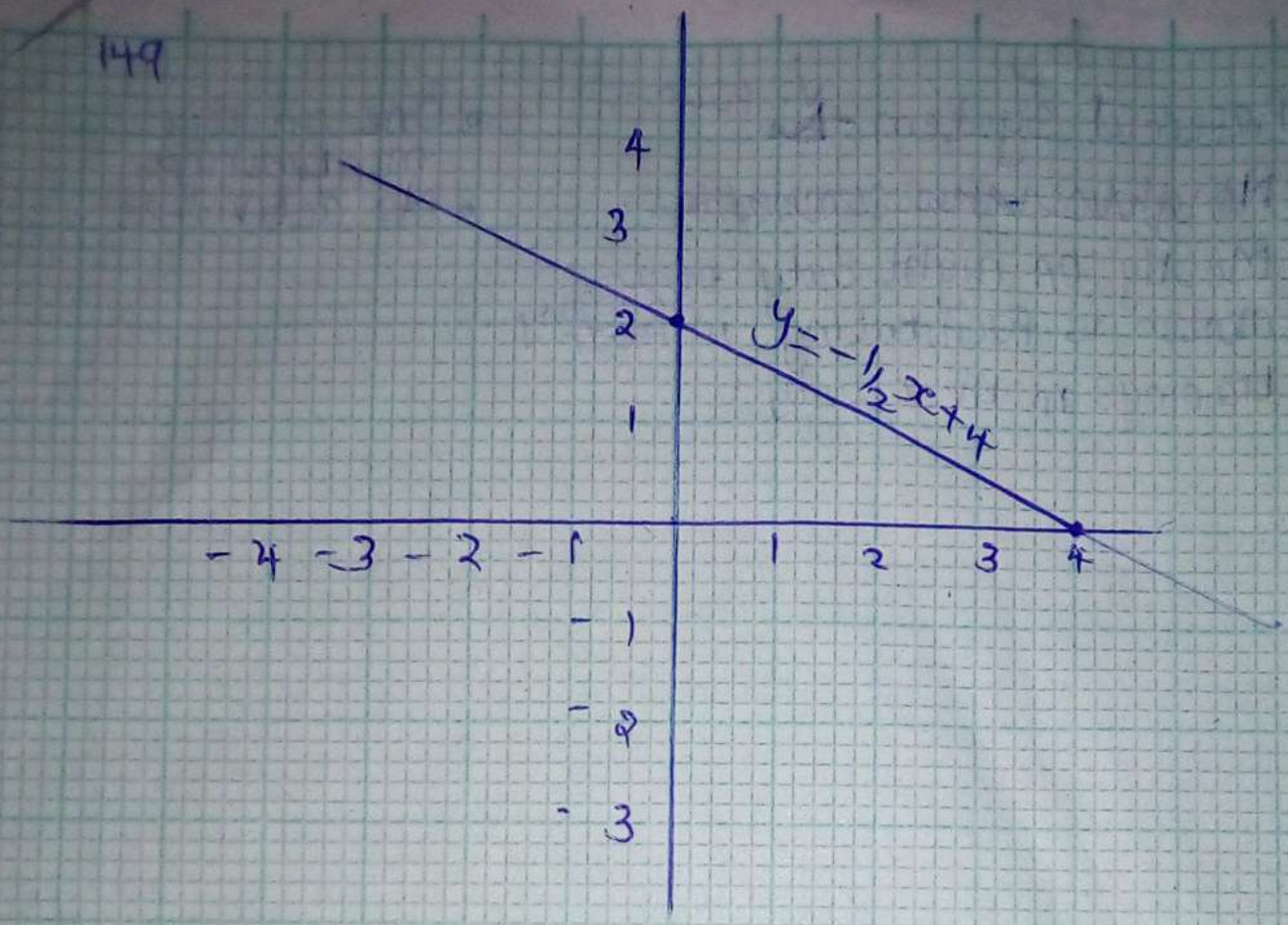
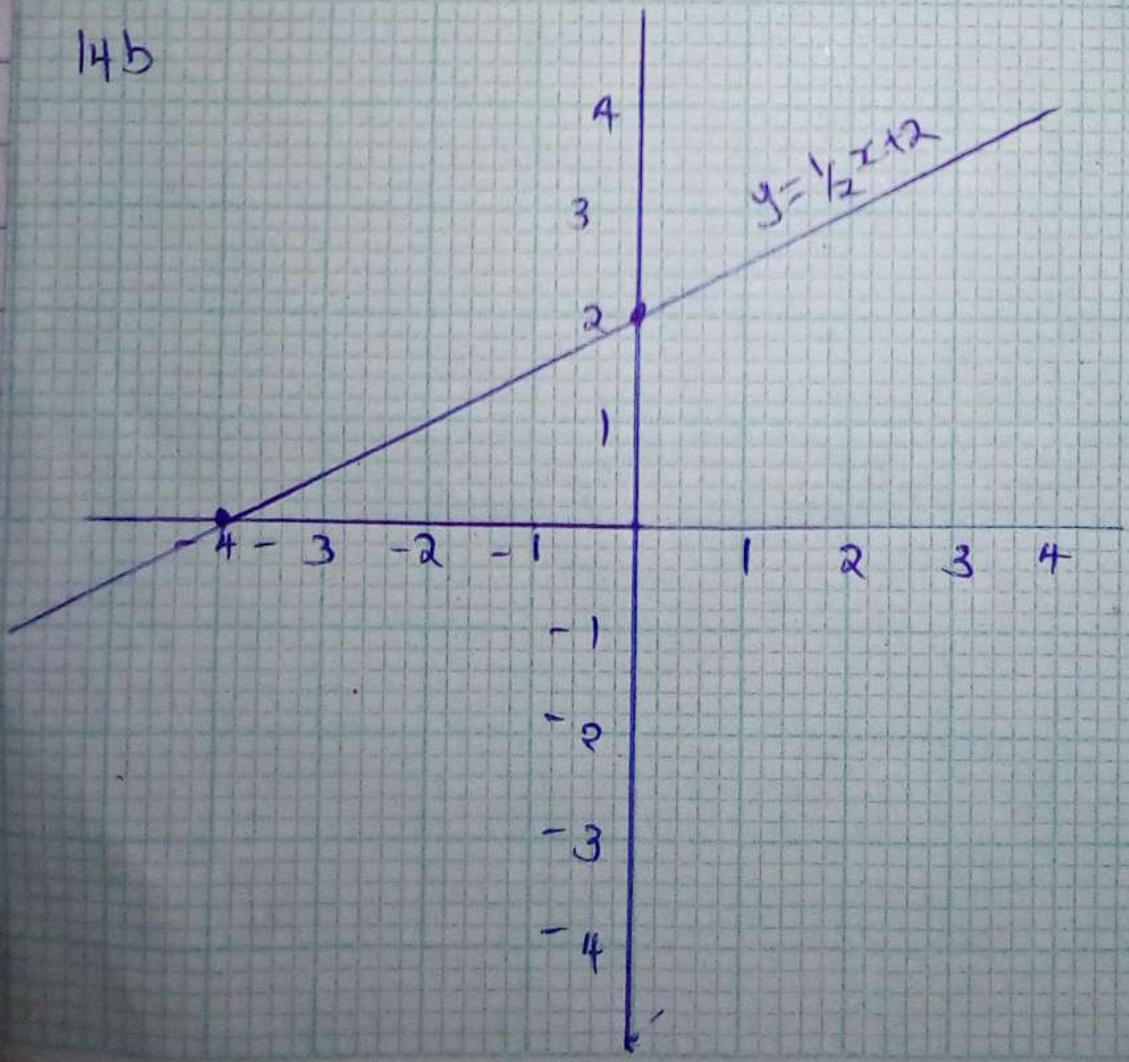
149



14b



14 b'

$$2y - 4x - 3 = 16 - 6y - 3$$

$$2y + 6y = -3 + 3 + 16 + 4x$$

$$8y = 4x + 16$$

$$y = \frac{1}{2}x + 2$$

x	-4	0
y	0	2

7

$$\frac{y-y_1}{m} = \frac{m}{m}(x-x_1)$$

$$\frac{y-y_1}{m} - x = -x_1$$

$$x_1 = x - \left(\frac{y-y_1}{m}\right)$$

8 $$z_0 = \frac{r-\mu_r}{\sigma_r}$$

$$z_0\sigma_r = r-\mu_r$$

$$r = z_0\sigma_r + \mu_r$$

9. $$a\left(\frac{x}{a}\right) + \left(\frac{y}{a}\right)^a = 1 \times a$$

$$x + y = a$$

$$x = a - y$$

10

$$1 + \sqrt{x} = 4$$

$$\sqrt{x} = 4-1$$

$$(\sqrt{x})^2 = (3)^2$$

$$x = 9$$

11 $$E = \frac{z \cdot s}{\sqrt{n}}$$

$$\sqrt{n} = \frac{z \cdot s}{E}$$

$$n = \frac{z^2 \cdot s^2}{E^2}$$

12

$$\sigma_{\bar{x}} = \frac{\sigma}{\sqrt{n}}$$

$$\sqrt{n} = \frac{\sigma}{\sigma_{\bar{x}}}$$

$$n = \frac{1}{1_{\bar{x}}}$$

13 $$r = \frac{z_0}{\sqrt{n-1}}$$

$$n-1 = \frac{z_0^2}{r^2}$$

$$n = \frac{z_0^2 + 1}{r^2}$$

14

a) $2x + 4y = 8$

$$4y = -2x + 8$$

$$y = -\frac{1}{2}x + 2$$

x	0	4
y	2	0

1.

$$E = t \cdot \frac{S}{\sqrt{n}}$$

2.795 =

$$t = \frac{E \sqrt{N}}{S}$$

$$= \frac{2.795 \sqrt{9}}{4.83}$$

$$= 1.8323$$

2. $x = \bar{x} + 2S$

$$\frac{x - \bar{x}}{S} = 2$$

$$\frac{56.98 - 54.7}{2.6}$$

$$= 1.646$$

3

$$Z = \frac{x - \bar{x}}{S}$$

$$x = 2S + \bar{x}$$

$$2.1 \times 23.2 + 319.2$$

$$= 365.92$$

4

$$S = \sqrt{\frac{\Sigma (x_1 - \bar{x})^2}{n-1}}$$

$x_1 - \bar{x}$	$2.3 - 2.3 = 0$
$x_2 - \bar{x}$	$1.7 - 2.3 = -0.6$
$x_3 - \bar{x}$	$2.9 - 2.3 = 0.6$

$$S = \sqrt{\frac{\Sigma (0 + 0.6 - 0.6)^2}{3}}$$

$$S = \sqrt{\left(\frac{0}{3}\right)^2}$$

$$= = 0$$

5

$$\sigma_{\bar{x}} = \frac{\sigma}{\sqrt{n}}$$

$$\sigma = \sigma_{\bar{x}} \sqrt{n}$$

6.

$$P(E \text{ OR } F) = P(E) + P(F) - P(E \text{ AND } F)$$

$$P(E \text{ AND } F) = P(E) + P(F) - P(E \text{ OR } F)$$