

ANSWER 4

(a) fitted value at $x=7$ is $\hat{y}(7)$

$$\hat{y} = 18 - 0.4x$$

$$\hat{y}(7) = 18 - 0.4(7) = 18 - 2.8 = 15.2$$

\therefore fitted value at $x=7$ is 15.2

(b) residual at $x=3$ and $y=20$
is $20 - \hat{y}(3)$

$$= 20 - 18 + 0.4(3)$$

$$= 2 + 0.4(3) = 3.2$$