

3. Which of the following are correct calculations for difference quotient of:

$$e(n) = 9n + 1$$

$$e(n) = 9n + 1$$

$$e(n+h) = 9(h+n) + 1$$

$$= 9h + 9n + 1$$

$$\frac{e(n+h) - e(n)}{h} = \frac{(9h + 9n + 1) - (9(n+1) + 1)}{h}$$

$$= \frac{9h}{h}$$

$$= \frac{h(9)}{h}$$

$$= 9$$

$$e(n) = 9n + 1$$

$$e(n+h) = 9(h+n) + 1$$

$$= 9h + 9n + 10$$

$$\frac{e(n+h) - e(n)}{h} = \frac{(9h + 9n + 10) - (9n + 1)}{h}$$

$$= \frac{9h}{h}$$

$$= \frac{h(9)}{h}$$

$$= 9$$

$$e(n) = 9n + 1$$

$$e(n+h) = 9(h+n) + 1$$

$$= 9h + 9n + 1$$

$$\frac{e(n+h) - e(n)}{h} = \frac{(9h + 9n + 1) - (9n + 1)}{h}$$

$$= \frac{9h}{h}$$

$$= \frac{h(9)}{h}$$

$$= 9$$

$$e(n) = 9n + 1$$

$$e(n+h) = 9(h+n) + 1$$

$$= 9h + 9n - 8$$

$$\frac{e(n+h) - e(n)}{h} = \frac{(9h + 9n + 19) - (9n + 1)}{h}$$

$$= \frac{9h}{h}$$

$$= \frac{h(9)}{h}$$

$$= 9$$

Solution