

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

$$n(x) = 4x + 3$$

$$n(x) = 4x + 3$$

$$n(x+h) = 4(h+x) + 3$$

$$= 4h + 4x + 3$$

$$\frac{n(x+h) - n(x)}{h} = \frac{(4h + 4x + 3) - (4(x+1) + 3)}{h}$$

$$= \frac{4h}{h}$$

$$= \frac{h(4)}{h}$$

$$= 4$$

$$n(x) = 4x + 3$$

$$n(x+h) = 4(h+x) + 3$$

$$= 4h + 4x + 7$$

$$\frac{n(x+h) - n(x)}{h} = \frac{(4h + 4x + 7) - (4x + 3)}{h}$$

$$= \frac{4h}{h}$$

$$= \frac{h(4)}{h}$$

$$= 4$$

$$n(x) = 4x + 3$$

$$n(x+h) = 4(h+x) + 3$$

$$= 4h + 4x + 3$$

$$\frac{n(x+h) - n(x)}{h} = \frac{(4h + 4x + 3) - (4x + 3)}{h}$$

$$= \frac{4h}{h}$$

$$= \frac{h(4)}{h}$$

$$= 4$$

$$n(x) = 4x + 3$$

$$n(x+h) = 4(h+x) + 3$$

$$= 4h + 4x - 1$$

$$\frac{n(x+h) - n(x)}{h} = \frac{(4h + 4x + 11) - (4x + 3)}{h}$$

$$= \frac{4h}{h}$$

$$= \frac{h(4)}{h}$$

$$= 4$$

Solution