

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

$$n(x) = 2x + 8$$

$$n(x) = 2x + 8$$

$$n(x+h) = 2(h+x) + 8$$

$$= 2h + 2x + 8$$

$$\frac{n(x+h) - n(x)}{h} = \frac{(2h + 2x + 8) - (2(x+1) + 8)}{h}$$

$$= \frac{2h}{h}$$

$$= \frac{h(2)}{h}$$

$$= 2$$

$$n(x) = 2x + 8$$

$$n(x+h) = 2(h+x) + 8$$

$$= 2h + 2x + 10$$

$$\frac{n(x+h) - n(x)}{h} = \frac{(2h + 2x + 10) - (2x + 8)}{h}$$

$$= \frac{2h}{h}$$

$$= \frac{h(2)}{h}$$

$$= 2$$

$$n(x) = 2x + 8$$

$$n(x+h) = 2(h+x) + 8$$

$$= 2h + 2x + 8$$

$$\frac{n(x+h) - n(x)}{h} = \frac{(2h + 2x + 8) - (2x + 8)}{h}$$

$$= \frac{2h}{h}$$

$$= \frac{h(2)}{h}$$

$$= 2$$

$$n(x) = 2x + 8$$

$$n(x+h) = 2(h+x) + 8$$

$$= 2h + 2x + 6$$

$$\frac{n(x+h) - n(x)}{h} = \frac{(2h + 2x + 12) - (2x + 8)}{h}$$

$$= \frac{2h}{h}$$

$$= \frac{h(2)}{h}$$

$$= 2$$

**Solution**