

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

$$t(n) = 2n + 1$$

$$t(n) = 2n + 1$$

$$t(n+h) = 2(h+n) + 1$$

$$= 2h + 2n + 1$$

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

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

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

$$= 2$$

$$t(n) = 2n + 1$$

$$t(n+h) = 2(h+n) + 1$$

$$= 2h + 2n + 3$$

$$\frac{t(n+h) - t(n)}{h} = \frac{(2h + 2n + 3) - (2n + 1)}{h}$$

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

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

$$= 2$$

$$t(n) = 2n + 1$$

$$t(n+h) = 2(h+n) + 1$$

$$= 2h + 2n + 1$$

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

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

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

$$= 2$$

$$t(n) = 2n + 1$$

$$t(n+h) = 2(h+n) + 1$$

$$= 2h + 2n - 1$$

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

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

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

$$= 2$$

Solution