

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

$$t(n) = 7n + 2$$

$$t(n) = 7n + 2$$

$$t(n+h) = 7(h+n) + 2$$

$$= 7h + 7n + 2$$

$$\frac{t(n+h) - t(n)}{h} = \frac{(7h + 7n + 2) - (7(n+1) + 2)}{h}$$

$$= \frac{7h}{h}$$

$$= \frac{h(7)}{h}$$

$$= 7$$

$$t(n) = 7n + 2$$

$$t(n+h) = 7(h+n) + 2$$

$$= 7h + 7n + 9$$

$$\frac{t(n+h) - t(n)}{h} = \frac{(7h + 7n + 9) - (7n + 2)}{h}$$

$$= \frac{7h}{h}$$

$$= \frac{h(7)}{h}$$

$$= 7$$

$$t(n) = 7n + 2$$

$$t(n+h) = 7(h+n) + 2$$

$$= 7h + 7n + 2$$

$$\frac{t(n+h) - t(n)}{h} = \frac{(7h + 7n + 2) - (7n + 2)}{h}$$

$$= \frac{7h}{h}$$

$$= \frac{h(7)}{h}$$

$$= 7$$

$$t(n) = 7n + 2$$

$$t(n+h) = 7(h+n) + 2$$

$$= 7h + 7n - 5$$

$$\frac{t(n+h) - t(n)}{h} = \frac{(7h + 7n + 16) - (7n + 2)}{h}$$

$$= \frac{7h}{h}$$

$$= \frac{h(7)}{h}$$

$$= 7$$

Solution