

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

$$t(c) = 3c + 1$$

$$t(c) = 3c + 1$$

$$t(c+h) = 3(c+h) + 1$$

$$= 3c + 3h + 1$$

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

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$$= 3$$

$$t(c) = 3c + 1$$

$$t(c+h) = 3(c+h) + 1$$

$$= 3c + 3h + 4$$

$$\frac{t(c+h) - t(c)}{h} = \frac{(3c + 3h + 4) - (3c + 1)}{h}$$

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$$= 3$$

$$t(c) = 3c + 1$$

$$t(c+h) = 3(c+h) + 1$$

$$= 3c + 3h + 1$$

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

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$$= 3$$

$$t(c) = 3c + 1$$

$$t(c+h) = 3(c+h) + 1$$

$$= 3c + 3h - 2$$

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

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$$= 3$$

**Solution**