

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

$$t(q) = q + 1$$

$$t(q) = q + 1$$

$$t(q+h) = h + q + 1$$

$$= h + q + 1$$

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

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

$$= \frac{h(1)}{h}$$

$$= 1$$

$$t(q) = q + 1$$

$$t(q+h) = h + q + 1$$

$$= h + q + 2$$

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

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

$$= \frac{h(1)}{h}$$

$$= 1$$

$$t(q) = q + 1$$

$$t(q+h) = h + q + 1$$

$$= h + q + 1$$

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

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

$$= \frac{h(1)}{h}$$

$$= 1$$

$$t(q) = q + 1$$

$$t(q+h) = h + q + 1$$

$$= h + q$$

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

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

$$= \frac{h(1)}{h}$$

$$= 1$$

Solution