

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

$$g(q) = 7q + 6$$

$$g(q) = 7q + 6$$

$$g(q+h) = 7(h+q) + 6$$

$$= 7h + 7q + 6$$

$$\frac{g(q+h) - g(q)}{h} = \frac{(7h + 7q + 6) - (7(q+1) + 6)}{h}$$

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

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

$$= 7$$

$$g(q) = 7q + 6$$

$$g(q+h) = 7(h+q) + 6$$

$$= 7h + 7q + 13$$

$$\frac{g(q+h) - g(q)}{h} = \frac{(7h + 7q + 13) - (7q + 6)}{h}$$

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

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

$$= 7$$

$$g(q) = 7q + 6$$

$$g(q+h) = 7(h+q) + 6$$

$$= 7h + 7q + 6$$

$$\frac{g(q+h) - g(q)}{h} = \frac{(7h + 7q + 6) - (7q + 6)}{h}$$

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

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

$$= 7$$

$$g(q) = 7q + 6$$

$$g(q+h) = 7(h+q) + 6$$

$$= 7h + 7q - 1$$

$$\frac{g(q+h) - g(q)}{h} = \frac{(7h + 7q - 1) - (7q + 6)}{h}$$

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

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

$$= 7$$

**Solution**