

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

$$q(z) = 5z + 5$$

$$q(z) = 5z + 5$$

$$q(z+h) = 5(h+z) + 5$$

$$= 5h + 5z + 5$$

$$\frac{q(z+h) - q(z)}{h} = \frac{(5h + 5z + 5) - (5(z+1) + 5)}{h}$$

$$= \frac{5h}{h}$$

$$= \frac{h(5)}{h}$$

$$= 5$$

$$q(z) = 5z + 5$$

$$q(z+h) = 5(h+z) + 5$$

$$= 5h + 5z + 10$$

$$\frac{q(z+h) - q(z)}{h} = \frac{(5h + 5z + 10) - (5z + 5)}{h}$$

$$= \frac{5h}{h}$$

$$= \frac{h(5)}{h}$$

$$= 5$$

$$q(z) = 5z + 5$$

$$q(z+h) = 5(h+z) + 5$$

$$= 5h + 5z + 5$$

$$\frac{q(z+h) - q(z)}{h} = \frac{(5h + 5z + 5) - (5z + 5)}{h}$$

$$= \frac{5h}{h}$$

$$= \frac{h(5)}{h}$$

$$= 5$$

$$q(z) = 5z + 5$$

$$q(z+h) = 5(h+z) + 5$$

$$= 5h + 5z$$

$$\frac{q(z+h) - q(z)}{h} = \frac{(5h + 5z + 15) - (5z + 5)}{h}$$

$$= \frac{5h}{h}$$

$$= \frac{h(5)}{h}$$

$$= 5$$

Solution