

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

$$k(z) = 5z + 7$$

$$k(z) = 5z + 7$$

$$k(z+h) = 5(h+z) + 7$$

$$= 5h + 5z + 7$$

$$\frac{k(z+h) - k(z)}{h} = \frac{(5h + 5z + 7) - (5(z+1) + 7)}{h}$$

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

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

$$= 5$$

$$k(z) = 5z + 7$$

$$k(z+h) = 5(h+z) + 7$$

$$= 5h + 5z + 12$$

$$\frac{k(z+h) - k(z)}{h} = \frac{(5h + 5z + 12) - (5z + 7)}{h}$$

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

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

$$= 5$$

$$k(z) = 5z + 7$$

$$k(z+h) = 5(h+z) + 7$$

$$= 5h + 5z + 7$$

$$\frac{k(z+h) - k(z)}{h} = \frac{(5h + 5z + 7) - (5z + 7)}{h}$$

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

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

$$= 5$$

$$k(z) = 5z + 7$$

$$k(z+h) = 5(h+z) + 7$$

$$= 5h + 5z + 2$$

$$\frac{k(z+h) - k(z)}{h} = \frac{(5h + 5z + 17) - (5z + 7)}{h}$$

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

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

$$= 5$$

Solution