

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

$$w(z) = 5z + 2$$

$$w(z) = 5z + 2$$

$$w(z+h) = 5(h+z) + 2$$

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

$$\frac{w(z+h) - w(z)}{h} = \frac{(5h + 5z + 2) - (5(z+1) + 2)}{h}$$

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

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

$$= 5$$

$$w(z) = 5z + 2$$

$$w(z+h) = 5(h+z) + 2$$

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

$$\frac{w(z+h) - w(z)}{h} = \frac{(5h + 5z + 7) - (5z + 2)}{h}$$

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

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

$$= 5$$

$$w(z) = 5z + 2$$

$$w(z+h) = 5(h+z) + 2$$

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

$$\frac{w(z+h) - w(z)}{h} = \frac{(5h + 5z + 2) - (5z + 2)}{h}$$

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

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

$$= 5$$

$$w(z) = 5z + 2$$

$$w(z+h) = 5(h+z) + 2$$

$$= 5h + 5z - 3$$

$$\frac{w(z+h) - w(z)}{h} = \frac{(5h + 5z + 12) - (5z + 2)}{h}$$

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

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

$$= 5$$

**Solution**