

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

$$j(z) = 3z + 4$$

$$j(z) = 3z + 4$$

$$j(z+h) = 3(h+z) + 4$$

$$= 3h + 3z + 4$$

$$\frac{j(z+h) - j(z)}{h} = \frac{(3h+3z+4) - (3(z+1)+4)}{h}$$

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$$= 3$$

$$j(z) = 3z + 4$$

$$j(z+h) = 3(h+z) + 4$$

$$= 3h + 3z + 7$$

$$\frac{j(z+h) - j(z)}{h} = \frac{(3h+3z+7) - (3z+4)}{h}$$

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$$= 3$$

$$j(z) = 3z + 4$$

$$j(z+h) = 3(h+z) + 4$$

$$= 3h + 3z + 4$$

$$\frac{j(z+h) - j(z)}{h} = \frac{(3h+3z+4) - (3z+4)}{h}$$

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$$= 3$$

$$j(z) = 3z + 4$$

$$j(z+h) = 3(h+z) + 4$$

$$= 3h + 3z + 1$$

$$\frac{j(z+h) - j(z)}{h} = \frac{(3h+3z+10) - (3z+4)}{h}$$

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$$= 3$$

**Solution**