

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

$$g(j) = 4j + 6$$

$$g(j) = 4j + 6$$

$$g(j+h) = 4(h+j) + 6$$

$$= 4h + 4j + 6$$

$$\frac{g(j+h) - g(j)}{h} = \frac{(4h + 4j + 6) - (4(j+1) + 6)}{h}$$

$$= \frac{4h}{h}$$

$$= \frac{h(4)}{h}$$

$$= 4$$

$$g(j) = 4j + 6$$

$$g(j+h) = 4(h+j) + 6$$

$$= 4h + 4j + 10$$

$$\frac{g(j+h) - g(j)}{h} = \frac{(4h + 4j + 10) - (4j + 6)}{h}$$

$$= \frac{4h}{h}$$

$$= \frac{h(4)}{h}$$

$$= 4$$

$$g(j) = 4j + 6$$

$$g(j+h) = 4(h+j) + 6$$

$$= 4h + 4j + 6$$

$$\frac{g(j+h) - g(j)}{h} = \frac{(4h + 4j + 6) - (4j + 6)}{h}$$

$$= \frac{4h}{h}$$

$$= \frac{h(4)}{h}$$

$$= 4$$

$$g(j) = 4j + 6$$

$$g(j+h) = 4(h+j) + 6$$

$$= 4h + 4j + 2$$

$$\frac{g(j+h) - g(j)}{h} = \frac{(4h + 4j + 14) - (4j + 6)}{h}$$

$$= \frac{4h}{h}$$

$$= \frac{h(4)}{h}$$

$$= 4$$

Solution