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

$y(j) = 2j + 6$

$y(j) = 2j + 6$

$y(j+h) = 2(h + j) + 6$

$= 2h + 2j + 6$

$$\frac{y(j+h) - y(j)}{h} = \frac{(2h + 2j + 6) - (2(j+1) + 6)}{h}$$

$$= \frac{2h}{h}$$

$$= \frac{h(2)}{h}$$

$= 2$

$y(j) = 2j + 6$

$y(j+h) = 2(h + j) + 6$

$= 2h + 2j + 8$

$$\frac{y(j+h) - y(j)}{h} = \frac{(2h + 2j + 8) - (2j + 6)}{h}$$

$$= \frac{2h}{h}$$

$$= \frac{h(2)}{h}$$

$= 2$

$y(j) = 2j + 6$

$y(j+h) = 2(h + j) + 6$

$= 2h + 2j + 6$

$$\frac{y(j+h) - y(j)}{h} = \frac{(2h + 2j + 6) - (2j + 6)}{h}$$

$$= \frac{2h}{h}$$

$$= \frac{h(2)}{h}$$

$= 2$

$y(j) = 2j + 6$

$y(j+h) = 2(h + j) + 6$

$= 2h + 2j + 4$

$$\frac{y(j+h) - y(j)}{h} = \frac{(2h + 2j + 10) - (2j + 6)}{h}$$

$$= \frac{2h}{h}$$

$$= \frac{h(2)}{h}$$

$= 2$

Solution