

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

$$j(x) = 2x + 1$$

$$j(x) = 2x + 1$$

$$j(x+h) = 2(h+x) + 1$$

$$= 2h + 2x + 1$$

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

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

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

$$= 2$$

$$j(x) = 2x + 1$$

$$j(x+h) = 2(h+x) + 1$$

$$= 2h + 2x + 3$$

$$\frac{j(x+h) - j(x)}{h} = \frac{(2h+2x+3) - (2x+1)}{h}$$

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

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

$$= 2$$

$$j(x) = 2x + 1$$

$$j(x+h) = 2(h+x) + 1$$

$$= 2h + 2x + 1$$

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

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

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

$$= 2$$

$$j(x) = 2x + 1$$

$$j(x+h) = 2(h+x) + 1$$

$$= 2h + 2x - 1$$

$$\frac{j(x+h) - j(x)}{h} = \frac{(2h+2x+5) - (2x+1)}{h}$$

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

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

$$= 2$$

**Solution**