

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

$$d(j) = 6j + 1$$

$$d(j) = 6j + 1$$

$$d(j+h) = 6(h+j) + 1$$

$$= 6h + 6j + 1$$

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

$$= \frac{6h}{h}$$

$$= \frac{h(6)}{h}$$

$$= 6$$

$$d(j) = 6j + 1$$

$$d(j+h) = 6(h+j) + 1$$

$$= 6h + 6j + 7$$

$$\frac{d(j+h) - d(j)}{h} = \frac{(6h + 6j + 7) - (6j + 1)}{h}$$

$$= \frac{6h}{h}$$

$$= \frac{h(6)}{h}$$

$$= 6$$

$$d(j) = 6j + 1$$

$$d(j+h) = 6(h+j) + 1$$

$$= 6h + 6j + 1$$

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

$$= \frac{6h}{h}$$

$$= \frac{h(6)}{h}$$

$$= 6$$

$$d(j) = 6j + 1$$

$$d(j+h) = 6(h+j) + 1$$

$$= 6h + 6j - 5$$

$$\frac{d(j+h) - d(j)}{h} = \frac{(6h + 6j + 13) - (6j + 1)}{h}$$

$$= \frac{6h}{h}$$

$$= \frac{h(6)}{h}$$

$$= 6$$

Solution