

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

$$k(x) = 9x + 9$$

$$k(x) = 9x + 9$$

$$k(x+h) = 9(h+x) + 9$$

$$= 9h + 9x + 9$$

$$\frac{k(x+h) - k(x)}{h} = \frac{(9h + 9x + 9) - (9(x+1) + 9)}{h}$$

$$= \frac{9h}{h}$$

$$= \frac{h(9)}{h}$$

$$= 9$$

$$k(x) = 9x + 9$$

$$k(x+h) = 9(h+x) + 9$$

$$= 9h + 9x + 18$$

$$\frac{k(x+h) - k(x)}{h} = \frac{(9h + 9x + 18) - (9x + 9)}{h}$$

$$= \frac{9h}{h}$$

$$= \frac{h(9)}{h}$$

$$= 9$$

$$k(x) = 9x + 9$$

$$k(x+h) = 9(h+x) + 9$$

$$= 9h + 9x + 9$$

$$\frac{k(x+h) - k(x)}{h} = \frac{(9h + 9x + 9) - (9x + 9)}{h}$$

$$= \frac{9h}{h}$$

$$= \frac{h(9)}{h}$$

$$= 9$$

$$k(x) = 9x + 9$$

$$k(x+h) = 9(h+x) + 9$$

$$= 9h + 9x$$

$$\frac{k(x+h) - k(x)}{h} = \frac{(9h + 9x + 27) - (9x + 9)}{h}$$

$$= \frac{9h}{h}$$

$$= \frac{h(9)}{h}$$

$$= 9$$

**Solution**