

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

$$k(a) = 6a + 9$$

$$k(a) = 6a + 9$$

$$k(a+h) = 6(a+h) + 9$$

$$= 6a + 6h + 9$$

$$\frac{k(a+h) - k(a)}{h} = \frac{(6a + 6h + 9) - (6(a+1) + 9)}{h}$$

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

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

$$= 6$$

$$k(a) = 6a + 9$$

$$k(a+h) = 6(a+h) + 9$$

$$= 6a + 6h + 15$$

$$\frac{k(a+h) - k(a)}{h} = \frac{(6a + 6h + 15) - (6a + 9)}{h}$$

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

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

$$= 6$$

$$k(a) = 6a + 9$$

$$k(a+h) = 6(a+h) + 9$$

$$= 6a + 6h + 9$$

$$\frac{k(a+h) - k(a)}{h} = \frac{(6a + 6h + 9) - (6a + 9)}{h}$$

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

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

$$= 6$$

$$k(a) = 6a + 9$$

$$k(a+h) = 6(a+h) + 9$$

$$= 6a + 6h + 3$$

$$\frac{k(a+h) - k(a)}{h} = \frac{(6a + 6h + 21) - (6a + 9)}{h}$$

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

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

$$= 6$$

Solution