

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

$$k(v) = 6v + 6$$

$$k(v) = 6v + 6$$

$$k(v+h) = 6(h+v) + 6$$

$$= 6h + 6v + 6$$

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

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

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

$$= 6$$

$$k(v) = 6v + 6$$

$$k(v+h) = 6(h+v) + 6$$

$$= 6h + 6v + 12$$

$$\frac{k(v+h) - k(v)}{h} = \frac{(6h + 6v + 12) - (6v + 6)}{h}$$

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

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

$$= 6$$

$$k(v) = 6v + 6$$

$$k(v+h) = 6(h+v) + 6$$

$$= 6h + 6v + 6$$

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

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

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

$$= 6$$

$$k(v) = 6v + 6$$

$$k(v+h) = 6(h+v) + 6$$

$$= 6h + 6v$$

$$\frac{k(v+h) - k(v)}{h} = \frac{(6h + 6v + 18) - (6v + 6)}{h}$$

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

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

$$= 6$$

Solution