

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

$$f(s) = 8s + 6$$

$$f(s) = 8s + 6$$

$$f(s+h) = 8(h+s) + 6$$

$$= 8h + 8s + 6$$

$$\frac{f(s+h) - f(s)}{h} = \frac{(8h + 8s + 6) - (8(s+1) + 6)}{h}$$

$$= \frac{8h}{h}$$

$$= \frac{h(8)}{h}$$

$$= 8$$

$$f(s) = 8s + 6$$

$$f(s+h) = 8(h+s) + 6$$

$$= 8h + 8s + 14$$

$$\frac{f(s+h) - f(s)}{h} = \frac{(8h + 8s + 14) - (8s + 6)}{h}$$

$$= \frac{8h}{h}$$

$$= \frac{h(8)}{h}$$

$$= 8$$

$$f(s) = 8s + 6$$

$$f(s+h) = 8(h+s) + 6$$

$$= 8h + 8s + 6$$

$$\frac{f(s+h) - f(s)}{h} = \frac{(8h + 8s + 6) - (8s + 6)}{h}$$

$$= \frac{8h}{h}$$

$$= \frac{h(8)}{h}$$

$$= 8$$

$$f(s) = 8s + 6$$

$$f(s+h) = 8(h+s) + 6$$

$$= 8h + 8s - 2$$

$$\frac{f(s+h) - f(s)}{h} = \frac{(8h + 8s + 22) - (8s + 6)}{h}$$

$$= \frac{8h}{h}$$

$$= \frac{h(8)}{h}$$

$$= 8$$

Solution