

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

$$g(e) = 5e + 6$$

$$g(e) = 5e + 6$$

$$g(e+h) = 5(e+h) + 6$$

$$= 5e + 5h + 6$$

$$\frac{g(e+h) - g(e)}{h} = \frac{(5e + 5h + 6) - (5e + 6)}{h}$$

$$= \frac{5h}{h}$$

$$= \frac{h(5)}{h}$$

$$= 5$$

$$g(e) = 5e + 6$$

$$g(e+h) = 5(e+h) + 6$$

$$= 5e + 5h + 11$$

$$\frac{g(e+h) - g(e)}{h} = \frac{(5e + 5h + 11) - (5e + 6)}{h}$$

$$= \frac{5h}{h}$$

$$= \frac{h(5)}{h}$$

$$= 5$$

$$g(e) = 5e + 6$$

$$g(e+h) = 5(e+h) + 6$$

$$= 5e + 5h + 6$$

$$\frac{g(e+h) - g(e)}{h} = \frac{(5e + 5h + 6) - (5e + 6)}{h}$$

$$= \frac{5h}{h}$$

$$= \frac{h(5)}{h}$$

$$= 5$$

$$g(e) = 5e + 6$$

$$g(e+h) = 5(e+h) + 6$$

$$= 5e + 5h + 1$$

$$\frac{g(e+h) - g(e)}{h} = \frac{(5e + 5h + 16) - (5e + 6)}{h}$$

$$= \frac{5h}{h}$$

$$= \frac{h(5)}{h}$$

$$= 5$$

Solution