

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

$$n(f) = 4f + 9$$

$$n(f) = 4f + 9$$

$$n(f+h) = 4(f+h) + 9$$

$$= 4f + 4h + 9$$

$$\frac{n(f+h) - n(f)}{h} = \frac{(4f + 4h + 9) - (4(f+1) + 9)}{h}$$

$$= \frac{4h}{h}$$

$$= \frac{h(4)}{h}$$

$$= 4$$

$$n(f) = 4f + 9$$

$$n(f+h) = 4(f+h) + 9$$

$$= 4f + 4h + 13$$

$$\frac{n(f+h) - n(f)}{h} = \frac{(4f + 4h + 13) - (4f + 9)}{h}$$

$$= \frac{4h}{h}$$

$$= \frac{h(4)}{h}$$

$$= 4$$

$$n(f) = 4f + 9$$

$$n(f+h) = 4(f+h) + 9$$

$$= 4f + 4h + 9$$

$$\frac{n(f+h) - n(f)}{h} = \frac{(4f + 4h + 9) - (4f + 9)}{h}$$

$$= \frac{4h}{h}$$

$$= \frac{h(4)}{h}$$

$$= 4$$

$$n(f) = 4f + 9$$

$$n(f+h) = 4(f+h) + 9$$

$$= 4f + 4h + 5$$

$$\frac{n(f+h) - n(f)}{h} = \frac{(4f + 4h + 17) - (4f + 9)}{h}$$

$$= \frac{4h}{h}$$

$$= \frac{h(4)}{h}$$

$$= 4$$

**Solution**