

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

$$a(y) = 5y + 3$$

$$a(y) = 5y + 3$$

$$a(y+h) = 5(h+y) + 3$$

$$= 5h + 5y + 3$$

$$\frac{a(y+h) - a(y)}{h} = \frac{(5h + 5y + 3) - (5(y+1) + 3)}{h}$$

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

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

$$= 5$$

$$a(y) = 5y + 3$$

$$a(y+h) = 5(h+y) + 3$$

$$= 5h + 5y + 8$$

$$\frac{a(y+h) - a(y)}{h} = \frac{(5h + 5y + 8) - (5y + 3)}{h}$$

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

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

$$= 5$$

$$a(y) = 5y + 3$$

$$a(y+h) = 5(h+y) + 3$$

$$= 5h + 5y + 3$$

$$\frac{a(y+h) - a(y)}{h} = \frac{(5h + 5y + 3) - (5y + 3)}{h}$$

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

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

$$= 5$$

$$a(y) = 5y + 3$$

$$a(y+h) = 5(h+y) + 3$$

$$= 5h + 5y - 2$$

$$\frac{a(y+h) - a(y)}{h} = \frac{(5h + 5y + 13) - (5y + 3)}{h}$$

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

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

$$= 5$$

Solution