

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

$$a(x) = 7x + 8$$

$$a(x) = 7x + 8$$

$$a(x+h) = 7(h+x) + 8$$

$$= 7h + 7x + 8$$

$$\frac{a(x+h) - a(x)}{h} = \frac{(7h + 7x + 8) - (7(x+1) + 8)}{h}$$

$$= \frac{7h}{h}$$

$$= \frac{h(7)}{h}$$

$$= 7$$

$$a(x) = 7x + 8$$

$$a(x+h) = 7(h+x) + 8$$

$$= 7h + 7x + 15$$

$$\frac{a(x+h) - a(x)}{h} = \frac{(7h + 7x + 15) - (7x + 8)}{h}$$

$$= \frac{7h}{h}$$

$$= \frac{h(7)}{h}$$

$$= 7$$

$$a(x) = 7x + 8$$

$$a(x+h) = 7(h+x) + 8$$

$$= 7h + 7x + 8$$

$$\frac{a(x+h) - a(x)}{h} = \frac{(7h + 7x + 8) - (7x + 8)}{h}$$

$$= \frac{7h}{h}$$

$$= \frac{h(7)}{h}$$

$$= 7$$

$$a(x) = 7x + 8$$

$$a(x+h) = 7(h+x) + 8$$

$$= 7h + 7x + 1$$

$$\frac{a(x+h) - a(x)}{h} = \frac{(7h + 7x + 22) - (7x + 8)}{h}$$

$$= \frac{7h}{h}$$

$$= \frac{h(7)}{h}$$

$$= 7$$

**Solution**