

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

$$c(u) = 8u + 3$$

$$c(u) = 8u + 3$$

$$c(u+h) = 8(h+u) + 3$$

$$= 8h + 8u + 3$$

$$\frac{c(u+h) - c(u)}{h} = \frac{(8h + 8u + 3) - (8(u+1) + 3)}{h}$$

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

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

$$= 8$$

$$c(u) = 8u + 3$$

$$c(u+h) = 8(h+u) + 3$$

$$= 8h + 8u + 11$$

$$\frac{c(u+h) - c(u)}{h} = \frac{(8h + 8u + 11) - (8u + 3)}{h}$$

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

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

$$= 8$$

$$c(u) = 8u + 3$$

$$c(u+h) = 8(h+u) + 3$$

$$= 8h + 8u + 3$$

$$\frac{c(u+h) - c(u)}{h} = \frac{(8h + 8u + 3) - (8u + 3)}{h}$$

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

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

$$= 8$$

$$c(u) = 8u + 3$$

$$c(u+h) = 8(h+u) + 3$$

$$= 8h + 8u - 5$$

$$\frac{c(u+h) - c(u)}{h} = \frac{(8h + 8u + 19) - (8u + 3)}{h}$$

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

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

$$= 8$$

Solution