

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

$$r(y) = 3y + 2$$

$$r(y) = 3y + 2$$

$$r(y+h) = 3(h+y) + 2$$

$$= 3h + 3y + 2$$

$$\frac{r(y+h) - r(y)}{h} = \frac{(3h + 3y + 2) - (3(y+1) + 2)}{h}$$

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$$= 3$$

$$r(y) = 3y + 2$$

$$r(y+h) = 3(h+y) + 2$$

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

$$\frac{r(y+h) - r(y)}{h} = \frac{(3h + 3y + 5) - (3y + 2)}{h}$$

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$$= 3$$

$$r(y) = 3y + 2$$

$$r(y+h) = 3(h+y) + 2$$

$$= 3h + 3y + 2$$

$$\frac{r(y+h) - r(y)}{h} = \frac{(3h + 3y + 2) - (3y + 2)}{h}$$

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$$= 3$$

$$r(y) = 3y + 2$$

$$r(y+h) = 3(h+y) + 2$$

$$= 3h + 3y - 1$$

$$\frac{r(y+h) - r(y)}{h} = \frac{(3h + 3y + 8) - (3y + 2)}{h}$$

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$$= 3$$

**Solution**