

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

$$p(n) = 8n + 5$$

$$p(n) = 8n + 5$$

$$p(n+h) = 8(h+n) + 5$$

$$= 8h + 8n + 5$$

$$\frac{p(n+h) - p(n)}{h} = \frac{(8h + 8n + 5) - (8(n+1) + 5)}{h}$$

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

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

$$= 8$$

$$p(n) = 8n + 5$$

$$p(n+h) = 8(h+n) + 5$$

$$= 8h + 8n + 13$$

$$\frac{p(n+h) - p(n)}{h} = \frac{(8h + 8n + 13) - (8n + 5)}{h}$$

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

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

$$= 8$$

$$p(n) = 8n + 5$$

$$p(n+h) = 8(h+n) + 5$$

$$= 8h + 8n + 5$$

$$\frac{p(n+h) - p(n)}{h} = \frac{(8h + 8n + 5) - (8n + 5)}{h}$$

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

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

$$= 8$$

$$p(n) = 8n + 5$$

$$p(n+h) = 8(h+n) + 5$$

$$= 8h + 8n - 3$$

$$\frac{p(n+h) - p(n)}{h} = \frac{(8h + 8n + 21) - (8n + 5)}{h}$$

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

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

$$= 8$$

**Solution**