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

$s(b) = 3b^2 + 3b + 6$

$s(b) = 3b^2 + 3b + 6$

$s(b+h) = 3(b+h)^2 + 3(b+h) + 6$

$= 3b^2 + 6bh + 3b + 3h^2 + 3h + 6$

$$\frac{s(b+h) - s(b)}{h} = \frac{\left(3b^2+6hb+3b+3h^2+3h+6\right) - \left(3(b+1)^2+3(b+1)+6\right)}{h}$$

$$= \frac{3h^2+6bh+3h}{h}$$

$$= \frac{h(6b+3h+3)}{h}$$

$= 6b + 3h + 3$

$s(b) = 3b^2 + 3b + 6$

$s(b+h) = 3(b+h)^2 + 3(b+h) + 6$

$= 3b^2 + 6bh + 9b + 3h^2 + 9h + 12$

$$\frac{s(b+h) - s(b)}{h} = \frac{\left(3b^2+6hb+9b+3h^2+9h+12\right) - \left(3b^2+3b+6\right)}{h}$$

$$= \frac{3h^2+6bh+3h}{h}$$

$$= \frac{h(6b+3h+3)}{h}$$

$= 6b + 3h + 3$

$s(b) = 3b^2 + 3b + 6$

$s(b+h) = 3(b+h)^2 + 3(b+h) + 6$

$= 3b^2 + 6bh + 3b + 3h^2 + 3h + 6$

$$\frac{s(b+h) - s(b)}{h} = \frac{\left(3b^2+6hb+3b+3h^2+3h+6\right) - \left(3b^2+3b+6\right)}{h}$$

$$= \frac{3h^2+6bh+3h}{h}$$

$$= \frac{h(6b+3h+3)}{h}$$

$= 6b + 3h + 3$

$s(b) = 3b^2 + 3b + 6$

$s(b+h) = 3(b+h)^2 + 3(b+h) + 6$

$= 3b^2 + 6bh - 3b + 3h^2 - 3h + 6$

$$\frac{s(b+h) - s(b)}{h} = \frac{\left(3b^2+6hb+15b+3h^2+15h+24\right) - \left(3b^2+3b+6\right)}{h}$$

$$= \frac{3h^2+6bh+3h}{h}$$

$$= \frac{h(6(b+1)+3h+3)}{h}$$

$= 6b + 3h + 3$

**Solution**