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

$m(b) = 2b^2 + 9b + 9$

$m(b) = 2b^2 + 9b + 9$

$m(b+h) = 2(b+h)^2 + 9(b+h) + 9$

$= 2b^2 + 4bh + 9b + 2h^2 + 9h + 9$

$$\frac{m(b+h)-m(b)}{h} = \frac{\left(2b^2+4hb+9b+2h^2+9h+9\right)-\left(2(b+1)^2+9(b+1)+9\right)}{h}$$

$$= \frac{2h^2+4bh+9h}{h}$$

$$= \frac{h(4b+2h+9)}{h}$$

$= 4b + 2h + 9$

$m(b) = 2b^2 + 9b + 9$

$m(b+h) = 2(b+h)^2 + 9(b+h) + 9$

$= 2b^2 + 4bh + 13b + 2h^2 + 13h + 20$

$$\frac{m(b+h)-m(b)}{h} = \frac{\left(2b^2+4hb+13b+2h^2+13h+20\right)-\left(2b^2+9b+9\right)}{h}$$

$$= \frac{2h^2+4bh+9h}{h}$$

$$= \frac{h(4b+2h+9)}{h}$$

$= 4b + 2h + 9$

$m(b) = 2b^2 + 9b + 9$

$m(b+h) = 2(b+h)^2 + 9(b+h) + 9$

$= 2b^2 + 4bh + 9b + 2h^2 + 9h + 9$

$$\frac{m(b+h)-m(b)}{h} = \frac{\left(2b^2+4hb+9b+2h^2+9h+9\right)-\left(2b^2+9b+9\right)}{h}$$

$$= \frac{2h^2+4bh+9h}{h}$$

$$= \frac{h(4b+2h+9)}{h}$$

$= 4b + 2h + 9$

$m(b) = 2b^2 + 9b + 9$

$m(b+h) = 2(b+h)^2 + 9(b+h) + 9$

$= 2b^2 + 4bh + 5b + 2h^2 + 5h + 2$

$$\frac{m(b+h)-m(b)}{h} = \frac{\left(2b^2+4hb+17b+2h^2+17h+35\right)-\left(2b^2+9b+9\right)}{h}$$

$$= \frac{2h^2+4bh+9h}{h}$$

$$= \frac{h(4(b+1)+2h+9)}{h}$$

$= 4b + 2h + 9$

Solution