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

$c(b) = 9b^2 + 5b + 4$

$c(b) = 9b^2 + 5b + 4$

$c(b+h) = 9(b+h)^2 + 5(b+h) + 4$

$= 9b^2 + 18bh + 5b + 9h^2 + 5h + 4$

$$\frac{c(b+h)-c(b)}{h} = \frac{\left(9b^2+18hb+5b+9h^2+5h+4\right)-\left(9(b+1)^2+5(b+1)+4\right)}{h}$$

$$= \frac{9h^2+18bh+5h}{h}$$

$$= \frac{h(18b+9h+5)}{h}$$

$= 18b + 9h + 5$

$c(b) = 9b^2 + 5b + 4$

$c(b+h) = 9(b+h)^2 + 5(b+h) + 4$

$= 9b^2 + 18bh + 23b + 9h^2 + 23h + 18$

$$\frac{c(b+h)-c(b)}{h} = \frac{\left(9b^2+18hb+23b+9h^2+23h+18\right)-\left(9b^2+5b+4\right)}{h}$$

$$= \frac{9h^2+18bh+5h}{h}$$

$$= \frac{h(18b+9h+5)}{h}$$

$= 18b + 9h + 5$

$c(b) = 9b^2 + 5b + 4$

$c(b+h) = 9(b+h)^2 + 5(b+h) + 4$

$= 9b^2 + 18bh + 5b + 9h^2 + 5h + 4$

$$\frac{c(b+h)-c(b)}{h} = \frac{\left(9b^2+18hb+5b+9h^2+5h+4\right)-\left(9b^2+5b+4\right)}{h}$$

$$= \frac{9h^2+18bh+5h}{h}$$

$$= \frac{h(18b+9h+5)}{h}$$

$= 18b + 9h + 5$

$c(b) = 9b^2 + 5b + 4$

$c(b+h) = 9(b+h)^2 + 5(b+h) + 4$

$= 9b^2 + 18bh - 13b + 9h^2 - 13h + 8$

$$\frac{c(b+h)-c(b)}{h} = \frac{\left(9b^2+18hb+41b+9h^2+41h+50\right)-\left(9b^2+5b+4\right)}{h}$$

$$= \frac{9h^2+18bh+5h}{h}$$

$$= \frac{h(18(b+1)+9h+5)}{h}$$

$= 18b + 9h + 5$

Solution