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

$t(d) = 2d^2 + 5d + 9$

$t(d) = 2d^2 + 5d + 9$

$t(d+h) = 2(d+h)^2 + 5(d+h) + 9$

$= 2d^2 + 4dh + 5d + 2h^2 + 5h + 9$

$$\frac{t(d+h) - t(d)}{h} = \frac{\left(2d^2+4hd+5d+2h^2+5h+9\right) - \left(2(d+1)^2+5(d+1)+9\right)}{h}$$

$$= \frac{2h^2+4dh+5h}{h}$$

$$= \frac{h(4d+2h+5)}{h}$$

$= 4d + 2h + 5$

$t(d) = 2d^2 + 5d + 9$

$t(d+h) = 2(d+h)^2 + 5(d+h) + 9$

$= 2d^2 + 4dh + 9d + 2h^2 + 9h + 16$

$$\frac{t(d+h) - t(d)}{h} = \frac{\left(2d^2+4hd+9d+2h^2+9h+16\right) - \left(2d^2+5d+9\right)}{h}$$

$$= \frac{2h^2+4dh+5h}{h}$$

$$= \frac{h(4d+2h+5)}{h}$$

$= 4d + 2h + 5$

$t(d) = 2d^2 + 5d + 9$

$t(d+h) = 2(d+h)^2 + 5(d+h) + 9$

$= 2d^2 + 4dh + 5d + 2h^2 + 5h + 9$

$$\frac{t(d+h) - t(d)}{h} = \frac{\left(2d^2+4hd+5d+2h^2+5h+9\right) - \left(2d^2+5d+9\right)}{h}$$

$$= \frac{2h^2+4dh+5h}{h}$$

$$= \frac{h(4d+2h+5)}{h}$$

$= 4d + 2h + 5$

$t(d) = 2d^2 + 5d + 9$

$t(d+h) = 2(d+h)^2 + 5(d+h) + 9$

$= 2d^2 + 4dh + d + 2h^2 + h + 6$

$$\frac{t(d+h) - t(d)}{h} = \frac{\left(2d^2+4hd+13d+2h^2+13h+27\right) - \left(2d^2+5d+9\right)}{h}$$

$$= \frac{2h^2+4dh+5h}{h}$$

$$= \frac{h(4(d+1)+2h+5)}{h}$$

$= 4d + 2h + 5$

Solution