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

$d(x) = 7x^2 + 3x + 7$

$d(x) = 7x^2 + 3x + 7$

$d(x+h) = 7(h+x)^2 + 3(h+x) + 7$

$= 7h^2 + 14hx + 3h + 7x^2 + 3x + 7$

$$\frac{d(x+h) - d(x)}{h} = \frac{\left(7h^2+14xh+3h+7x^2+3x+7\right) - \left(7(x+1)^2+3(x+1)+7\right)}{h}$$

$$= \frac{7h^2+14xh+3h}{h}$$

$$= \frac{h(7h+14x+3)}{h}$$

$= 7h + 14x + 3$

$d(x) = 7x^2 + 3x + 7$

$d(x+h) = 7(h+x)^2 + 3(h+x) + 7$

$= 7h^2 + 14hx + 17h + 7x^2 + 17x + 17$

$$\frac{d(x+h) - d(x)}{h} = \frac{\left(7h^2+14xh+17h+7x^2+17x+17\right) - \left(7x^2+3x+7\right)}{h}$$

$$= \frac{7h^2+14xh+3h}{h}$$

$$= \frac{h(7h+14x+3)}{h}$$

$= 7h + 14x + 3$

$d(x) = 7x^2 + 3x + 7$

$d(x+h) = 7(h+x)^2 + 3(h+x) + 7$

$= 7h^2 + 14hx + 3h + 7x^2 + 3x + 7$

$$\frac{d(x+h) - d(x)}{h} = \frac{\left(7h^2+14xh+3h+7x^2+3x+7\right) - \left(7x^2+3x+7\right)}{h}$$

$$= \frac{7h^2+14xh+3h}{h}$$

$$= \frac{h(7h+14x+3)}{h}$$

$= 7h + 14x + 3$

$d(x) = 7x^2 + 3x + 7$

$d(x+h) = 7(h+x)^2 + 3(h+x) + 7$

$= 7h^2 + 14hx - 11h + 7x^2 - 11x + 11$

$$\frac{d(x+h) - d(x)}{h} = \frac{\left(7h^2+14xh+31h+7x^2+31x+41\right) - \left(7x^2+3x+7\right)}{h}$$

$$= \frac{7h^2+14xh+3h}{h}$$

$$= \frac{h(7h+14(x+1)+3)}{h}$$

$= 7h + 14x + 3$

**Solution**