2. Which of the following are correct calculations for difference quotient of: t(d) = 2 d + 5 t(d) = 2 d + 5 t(d+h) = 2 (d+h) + 5 -2 d + 2 h + 5

$$t(d+h) = 2(d+h) + 3$$

$$= 2d + 2h + 5$$

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

$$= \frac{2h}{h}$$

$$= \frac{h(2)}{h}$$

$$= 2$$

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

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

$$= 2d + 2h + 7$$

 $\frac{t\,(d\!+\!h)\,-t\,(d)}{=}\,\frac{(2\,d\!+\!2\,h\!+\!7)\,-\,(2\,d\!+\!5)}{}$ 

 $=\frac{2 \text{ h}}{\text{h}}$ 

 $=\frac{h(2)}{1}$ 

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

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

$$= 2 d + 2 h + 5$$

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

$$= \frac{2h}{h}$$

$$= \frac{h(2)}{h}$$

$$= 2$$

$$\begin{array}{c} t\;(d) = 2\;d + 5 \\ t\;(d+h) = 2\;(d+h) + 5 \\ = 2\;d + 2\;h + 3 \\ \frac{t\;(d+h) - t\;(d)}{h} = \frac{(2\;d + 2\;h + 9) - (2\;d + 5)}{h} \\ = \frac{2\;h}{h} \\ = \frac{h\;(2)}{h} \\ = 2 \end{array}$$

## Solution