2. Which of the following are correct calculations for difference quotient of: $k\left(z\right)=5\ z+7$ $k\left(z\right)=5\ z+7$

```
\begin{array}{l} k\,(\,z\,+h\,)\,=\,5\,\,(\,h\,+\,z\,)\,\,+\,7\\ =\,5\,\,h\,+\,5\,\,z\,+\,7\\ \frac{k\,(\,z\,+h\,)\,-\,k\,(\,z\,)}{h}\,=\,\frac{(\,5\,\,h\,+\,5\,\,z\,+\,7\,)\,-\,(\,5\,\,(\,z\,+\,1\,)\,+\,7\,)}{h}\\ =\,\frac{5\,\,h}{h}\\ =\,\frac{h\,(\,5\,)}{h}\\ =\,5 \end{array}
```

$$\begin{array}{c} k\,(\,z + h\,) = 5 \ (\,h + z\,) \ + \,7 \\ = 5 \ h + \,5 \ z \, + \,12 \\ \frac{k\,(\,z + h\,) - k\,(\,z\,)}{h} = \frac{(\,5 \ h + 5 \ z + 12\,) - (\,5 \ z + 7\,)}{h} \\ = \frac{5 \ h}{h} \\ = \frac{h\,(\,5\,)}{h} \\ = 5 \end{array}$$

$$k(z+h) = 5 (h + z) + 7$$

$$= 5 h + 5 z + 7$$

$$\frac{k(z+h) - k(z)}{h} = \frac{(5 h+5 z+7) - (5 z+7)}{h}$$

$$= \frac{5 h}{h}$$

$$= \frac{h(5)}{h}$$

$$= 5$$

$$k(z+h) = 5 (h + z) + 7$$

$\begin{array}{c} k\,(\,z\,) = 5\,\,z\,+\,7 \\ k\,(\,z + h\,) = 5\,\,(\,h\,+\,z\,)\,\,+\,7 \\ = 5\,\,h\,+\,5\,\,z\,+\,2 \\ \frac{k\,(\,z + h\,)\,-\,k\,(\,z\,)}{h} = \frac{(\,5\,h + 5\,\,z + 17\,)\,-\,(\,5\,\,z + 7\,)}{h} \\ = \frac{5\,h}{h} \\ = \frac{h\,(\,5\,)}{h} \\ = 5 \end{array}$

Solution