7. Which of the following are correct calculations for difference quotient of:  $d(s) = 5 \ s + 4$   $d(s) = 5 \ s + 4$   $d(s+h) = 5 \ (h+s) + 4$   $= 5 \ h + 5 \ s + 4$ 

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

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

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

$$= 5$$

$$d(s) = 5s+4$$

$$d(s+h) = 5(h+s)+4$$

$$= 5h+5s+9$$

$$\frac{d(s+h)-d(s)}{d(s+h)-d(s)} = \frac{(5h+5s+9)-(5s+4)}{d(s+h)-d(s)}$$

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

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

$$= 5$$

$$d(s) = 5s + 4$$

$$d(s+h) = 5(h+s) + 4$$

$$= 5h + 5s + 4$$

$$d(s+h) - d(s) = (5h+5s+4) - (5s+4)$$

$$\begin{array}{l} d\,(\,s\,) = 5\,\,s\,+\,4 \\ d\,(\,s + h\,) = 5\,\,(\,h\,+\,s\,)\,\,+\,4 \\ = 5\,\,h\,+\,5\,\,s\,-\,1 \\ \frac{d\,(\,s + h\,)\,-\,d\,(\,s\,)}{h} = \frac{(5\,\,h + 5\,\,s + 14\,)\,-\,(\,5\,\,s + 4\,)}{h} \\ = \frac{5\,h}{h} \\ = \frac{h\,(\,5\,)}{h} \\ = 5 \end{array}$$

## Solution

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

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

=5