4. Which of the following are correct calculations for difference quotient of:  $v\left(m\right)=8\ m+5$   $v\left(m\right)=8\ m+5$   $v\left(m+h\right)=8\ (h+m)+5$ 

```
= 8 h + 8 m + 5
\frac{v (m+h) - v (m)}{h} = \frac{(8 h+8 m+5) - (8 (m+1) + 5)}{h}
= \frac{8 h}{h}
= \frac{h (8)}{h}
= 8
v (m+h) = 8 m + 5
v (m+h) = 8 (h+m) + 5
= 8 h + 8 m + 13
\frac{v (m+h) - v (m)}{h} = \frac{(8 h+8 m+13) - (8 m+5)}{h}
```

```
=8
v(m) = 8 m + 5
v(m+h) = 8 (h + m) + 5
= 8 h + 8 m + 5
\frac{v(m+h) - v(m)}{h} = \frac{(8 h + 8 m + 5) - (8 m + 5)}{h}
= \frac{8 h}{h}
= \frac{h(8)}{h}
= 8
```

```
\begin{array}{c} v\left(m\right) = 8 \; m \; + \; 5 \\ v\left(m + h\right) = 8 \; \left(h \; + \; m\right) \; + \; 5 \\ = 8 \; h \; + \; 8 \; m \; - \; 3 \\ \frac{v\left(m + h\right) - v\left(m\right)}{h} = \frac{\left(8 \; h + 8 \; m + 21\right) - \left(8 \; m + 5\right)}{h} \\ = \frac{8 \; h}{h} \\ = \frac{h\left(8\right)}{h} \\ = 8 \end{array}
```

## Solution

 $=\frac{8 \text{ h}}{\text{h}}$ 

 $=\frac{h(8)}{}$