```
3. Which of the following are correct calculations for difference quotient of: j(u) = 7 u + 5 j(u) = 7 u + 5 j(u+h) = 7 (h+u) + 5 = 7 h + 7 u + 5 j(u+h) - j(u) = (7h+7u+5) - (7(u+1)+5)
```

$$\begin{array}{c} j\;(u)=7\;u+5\\ j\;(u+h)=7\;(h+u)+5\\ =7\;h+7\;u+5\\ \frac{j\;(u+h)-j\;(u)}{h}=\frac{(7\;h+7\;u+5)-(7\;u+5)}{h}\\ =\frac{7\;h}{h}\\ =\frac{h\;(7)}{h}\\ =7 \end{array}$$

```
\begin{array}{c} j\;(u)=7\;u+5\\ j\;(u+h)=7\;(h+u)+5\\ =7\;h+7\;u-2\\ \frac{j\;(u+h)-j\;(u)}{h}=\frac{(7\;h+7\;u+19)-(7\;u+5)}{h}\\ =\frac{7\;h}{h}\\ =\frac{h\;(7)}{h}\\ =7 \end{array}
```

## Solution

 $=\frac{h(7)}{h}$ =7