1. Which of the following are correct calculations for difference quotient of: $r(d) = 6 \ d + 2$ $r(d) = 6 \ d + 2$ $r(d+h) = 6 \ (d+h) + 2$ $= 6 \ d + 6 \ h + 2$

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\frac{r(d+h)-r(d)}{h} = \frac{(6 d+6 h+2)-(6 (d+1)+2)}{h}
= \frac{6 h}{h}
= \frac{h(6)}{h}
= 6
r(d) = 6 d + 2
r(d+h) = 6 (d+h) + 2
= 6 d + 6 h + 8
\frac{r(d+h)-r(d)}{h} = \frac{(6 d+6 h+8)-(6 d+2)}{h}
= \frac{6 h}{h}
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$$\begin{split} r\left(d\right) = & 6 \ d + 2 \\ r\left(d + h\right) = & 6 \ \left(d + h\right) + 2 \\ = & 6 \ d + 6 \ h - 4 \\ \frac{r\left(d + h\right) - r\left(d\right)}{h} = \frac{\left(6 \ d + 6 \ h + 14\right) - \left(6 \ d + 2\right)}{h} \\ = & \frac{6 \ h}{h} \\ = & \frac{h \left(6\right)}{h} \\ = & 6 \end{split}$$

Solution

 $=\frac{h(6)}{}$

=6