1. Which of the following are correct calculations for difference quotient of: r(e) = 2e + 3 r(e) = 2e + 3 r(e+h) = 2(e+h) + 3 = 2e + 2h + 3 r(e+h) - r(e) = (2e+2h+3) - (2(e+1)+3)

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\begin{split} \frac{r(e+h)-r(e)}{h} &= \frac{(2\,e+2\,h+3)-(2\,(e+1)+3)}{h} \\ &= \frac{2\,h}{h} \\ &= \frac{h\,(2)}{h} \\ &= 2 \end{split} r\,(e) = 2\,e\,+\,3 \\ r\,(e+h) = 2\,(e+h)\,+\,3 \\ &= 2\,e\,+\,2\,h\,+\,5 \\ \frac{r\,(e+h)-r\,(e)}{h} &= \frac{(2\,e+2\,h+5)-(2\,e+3)}{h} \\ &= \frac{2\,h}{h} \end{split}
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\begin{array}{c} r\left(e\right) = 2\ e \ +\ 3 \\ r\left(e + h\right) = 2\ \left(e \ +\ h\right) \ +\ 3 \\ = 2\ e \ +\ 2\ h \ +\ 3 \\ \frac{r\left(e + h\right) - r\left(e\right)}{h} = \frac{\left(2\ e + 2\ h + 3\right) - \left(2\ e + 3\right)}{h} \\ = \frac{2\ h}{h} \\ = \frac{h\left(2\right)}{h} \\ = 2 \end{array}
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r(e) = 2e + 3
r(e+h) = 2(e+h) + 3
= 2e + 2h + 1
\frac{r(e+h) - r(e)}{h} = \frac{(2e+2h+7) - (2e+3)}{h}
= \frac{2h}{h}
= \frac{h(2)}{h}
= 2
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Solution

 $=\frac{h(2)}{1}$

=2