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4. Which of the following are correct calculations for difference quotient of: j(x) = 2 x + 1 j(x) = 2 x + 1 j(x+h) = 2 (h+x) + 1 = 2 h + 2 x + 1 \frac{j(x+h)-j(x)}{h} = \frac{(2h+2x+1)-(2(x+1)+1)}{h}
```

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 \begin{aligned} & h & h \\ &= \frac{2h}{h} \\ &= \frac{h(2)}{h} \\ &= 2 \end{aligned}   = 2   \begin{aligned} & j(x) = 2 | x + 1 \\ & j(x+h) = 2 | (h+x) + 1 \\ &= 2 | h + 2 | x + 3 \\ & \frac{j(x+h)-j(x)}{h} = \frac{(2h+2x+3)-(2x+1)}{h} \\ &= \frac{2h}{h} \end{aligned}
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 \begin{array}{c} j\;(x)=2\;x+1\\ j\;(x+h)=2\;(h+x)\;+1\\ =2\;h+2\;x+1\\ \frac{j\;(x+h)-j\;(x)}{h}=\frac{(2\;h+2\;x+1)-(2\;x+1)}{h}\\ =\frac{2\;h}{h}\\ =\frac{h\;(2)}{h}\\ =2 \end{array}
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\begin{split} j(x) &= 2 x + 1 \\ j(x+h) &= 2 (h+x) + 1 \\ &= 2 h + 2 x - 1 \\ \frac{j(x+h) - j(x)}{h} &= \frac{(2 h + 2 x + 5) - (2 x + 1)}{h} \\ &= \frac{2 h}{h} \\ &= \frac{h(2)}{h} \\ &= 2 \end{split}
```

Solution

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