5. Which of the following are correct calculations for difference quotient of: x(b) = 5b + 3 x(b) = 5b + 3 x(b+h) = 5(b+h) + 3

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x (b+h) = 5 (b+h) + 3
= 5 b + 5 h + 3
\frac{x(b+h)-x(b)}{h} = \frac{(5 b+5 h+3)-(5 (b+1)+3)}{h}
= \frac{5 h}{h}
= \frac{h(5)}{h}
= 5
x (b) = 5 b + 3
x (b+h) = 5 (b+h) + 3
```

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 \begin{array}{l} x \ (b) = 5 \ b + 3 \\ x \ (b+h) = 5 \ (b+h) + 3 \\ = 5 \ b + 5 \ h - 2 \\ \frac{x \ (b+h) - x \ (b)}{h} = \frac{(5 \ b+5 \ h+13) - (5 \ b+3)}{h} \\ = \frac{5 \ h}{h} \\ = \frac{h \ (5)}{h} \\ = 5 \end{array}
```

## Solution