7. Which of the following are correct calculations for difference quotient of:

$x(n) = 7n + 1$

$x(n) = 7n + 1$

$x(n+h) = 7(h + n) + 1$

$= 7h + 7n + 1$

$\frac{x(n+h) - x(n)}{h} = \frac{(7h + 7n + 1) - (7(n+1) + 1)}{h}$

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

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

$= 7$

$x(n) = 7n + 1$

$x(n+h) = 7(h + n) + 1$

$= 7h + 7n + 8$

$\frac{x(n+h) - x(n)}{h} = \frac{(7h + 7n + 8) - (7n + 1)}{h}$

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

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

$= 7$

$x(n) = 7n + 1$

$x(n+h) = 7(h + n) + 1$

$= 7h + 7n + 1$

$\frac{x(n+h) - x(n)}{h} = \frac{(7h + 7n + 1) - (7n + 1)}{h}$

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

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

$= 7$

$x(n) = 7n + 1$

$x(n+h) = 7(h + n) + 1$

$= 7h + 7n - 6$

$\frac{x(n+h) - x(n)}{h} = \frac{(7h + 7n + 15) - (7n + 1)}{h}$

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

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

$= 7$

Solution