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

$v(n) = 8n + 4$

$v(n) = 8n + 4$

$v(n+h) = 8(h + n) + 4$

$= 8h + 8n + 4$

$\frac{v(n+h) - v(n)}{h} = \frac{(8h + 8n + 4) - (8(n+1) + 4)}{h}$

$= \frac{8h}{h}$

$= \frac{h(8)}{h}$

$= 8$

$v(n) = 8n + 4$

$v(n+h) = 8(h + n) + 4$

$= 8h + 8n + 12$

$\frac{v(n+h) - v(n)}{h} = \frac{(8h + 8n + 12) - (8n + 4)}{h}$

$= \frac{8h}{h}$

$= \frac{h(8)}{h}$

$= 8$

$v(n) = 8n + 4$

$v(n+h) = 8(h + n) + 4$

$= 8h + 8n + 4$

$\frac{v(n+h) - v(n)}{h} = \frac{(8h + 8n + 4) - (8n + 4)}{h}$

$= \frac{8h}{h}$

$= \frac{h(8)}{h}$

$= 8$

$v(n) = 8n + 4$

$v(n+h) = 8(h + n) + 4$

$= 8h + 8n - 4$

$\frac{v(n+h) - v(n)}{h} = \frac{(8h + 8n + 20) - (8n + 4)}{h}$

$= \frac{8h}{h}$

$= \frac{h(8)}{h}$

$= 8$

Solution