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

$b(v) = 3v + 1$

$b(v) = 3v + 1$

$b(v+h) = 3(h + v) + 1$

$= 3h + 3v + 1$

$$\frac{b(v+h) - b(v)}{h} = \frac{(3h+3v+1) - (3(v+1)+1)}{h}$$

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$= 3$

$b(v) = 3v + 1$

$b(v+h) = 3(h + v) + 1$

$= 3h + 3v + 4$

$$\frac{b(v+h) - b(v)}{h} = \frac{(3h+3v+4) - (3v+1)}{h}$$

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$= 3$

$b(v) = 3v + 1$

$b(v+h) = 3(h + v) + 1$

$= 3h + 3v + 1$

$$\frac{b(v+h) - b(v)}{h} = \frac{(3h+3v+1) - (3v+1)}{h}$$

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$= 3$

$b(v) = 3v + 1$

$b(v+h) = 3(h + v) + 1$

$= 3h + 3v - 2$

$$\frac{b(v+h) - b(v)}{h} = \frac{(3h+3v+7) - (3v+1)}{h}$$

$$= \frac{3h}{h}$$

$$= \frac{h(3)}{h}$$

$= 3$

Solution