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

$y(t) = 3t + 2$

$y(t) = 3t + 2$

$y(t+h) = 3(h + t) + 2$

$= 3h + 3t + 2$

$\frac{y(t+h) - y(t)}{h} = \frac{(3h+3t+2) - (3(t+1)+2)}{h}$

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

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

$= 3$

$y(t) = 3t + 2$

$y(t+h) = 3(h + t) + 2$

$= 3h + 3t + 5$

$\frac{y(t+h) - y(t)}{h} = \frac{(3h+3t+5) - (3t+2)}{h}$

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

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

$= 3$

$y(t) = 3t + 2$

$y(t+h) = 3(h + t) + 2$

$= 3h + 3t + 2$

$\frac{y(t+h) - y(t)}{h} = \frac{(3h+3t+2) - (3t+2)}{h}$

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

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

$= 3$

$y(t) = 3t + 2$

$y(t+h) = 3(h + t) + 2$

$= 3h + 3t - 1$

$\frac{y(t+h) - y(t)}{h} = \frac{(3h+3t+8) - (3t+2)}{h}$

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

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

$= 3$

Solution