2. Which of the following are correct calculations for difference quotient of:
$t(k) = 3k + 5$

$t(k) = 3k + 5$
$t(k+h) = 3(h + k) + 5$
$= 3h + 3k + 5$
$\frac{t(k+h) - t(k)}{h} = \frac{(3h+3k+5) - (3(k+1)+5)}{h}$
$= \frac{3h}{h}$
$= \frac{h(3)}{h}$
$= 3$

$t(k) = 3k + 5$
$t(k+h) = 3(h + k) + 5$
$= 3h + 3k + 8$
$\frac{t(k+h) - t(k)}{h} = \frac{(3h+3k+8) - (3k+5)}{h}$
$= \frac{3h}{h}$
$= \frac{h(3)}{h}$
$= 3$

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

$t(k) = 3k + 5$
$t(k+h) = 3(h + k) + 5$
$= 3h + 3k + 2$
$\frac{t(k+h) - t(k)}{h} = \frac{(3h+3k+11) - (3k+5)}{h}$
$= \frac{3h}{h}$
$= \frac{h(3)}{h}$
$= 3$

Solution