4. Which of the following are correct calculations for difference quotient of:
$u(t) = 5t + 7$

$u(t) = 5t + 7$
$u(t+h) = 5(h + t) + 7$
$= 5h + 5t + 7$
$\frac{u(t+h) - u(t)}{h} = \frac{(5h+5t+7) - (5(t+1)+7)}{h}$
$= \frac{5h}{h}$
$= \frac{h(5)}{h}$
$= 5$

$u(t) = 5t + 7$
$u(t+h) = 5(h + t) + 7$
$= 5h + 5t + 12$
$\frac{u(t+h) - u(t)}{h} = \frac{(5h+5t+12) - (5t+7)}{h}$
$= \frac{5h}{h}$
$= \frac{h(5)}{h}$
$= 5$

$u(t) = 5t + 7$
$u(t+h) = 5(h + t) + 7$
$= 5h + 5t + 7$
$\frac{u(t+h) - u(t)}{h} = \frac{(5h+5t+7) - (5t+7)}{h}$
$= \frac{5h}{h}$
$= \frac{h(5)}{h}$
$= 5$

$u(t) = 5t + 7$
$u(t+h) = 5(h + t) + 7$
$= 5h + 5t + 2$
$\frac{u(t+h) - u(t)}{h} = \frac{(5h+5t+17) - (5t+7)}{h}$
$= \frac{5h}{h}$
$= \frac{h(5)}{h}$
$= 5$

Solution