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

$b(t) = 4t + 7$
$b(t+h) = 4(h + t) + 7$
$= 4h + 4t + 7$
$\frac{b(t+h) - b(t)}{h} = \frac{(4h+4t+7) - (4(t+1)+7)}{h}$
$= \frac{4h}{h}$
$= \frac{h(4)}{h}$
$= 4$

$b(t) = 4t + 7$
$b(t+h) = 4(h + t) + 7$
$= 4h + 4t + 11$
$\frac{b(t+h) - b(t)}{h} = \frac{(4h+4t+11) - (4t+7)}{h}$
$= \frac{4h}{h}$
$= \frac{h(4)}{h}$
$= 4$

$b(t) = 4t + 7$
$b(t+h) = 4(h + t) + 7$
$= 4h + 4t + 7$
$\frac{b(t+h) - b(t)}{h} = \frac{(4h+4t+7) - (4t+7)}{h}$
$= \frac{4h}{h}$
$= \frac{h(4)}{h}$
$= 4$

$b(t) = 4t + 7$
$b(t+h) = 4(h + t) + 7$
$= 4h + 4t + 3$
$\frac{b(t+h) - b(t)}{h} = \frac{(4h+4t+15) - (4t+7)}{h}$
$= \frac{4h}{h}$
$= \frac{h(4)}{h}$
$= 4$

Solution