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

$u(q) = 5q + 5$

$u(q) = 5q + 5$

$u(q+h) = 5(h+q) + 5$

$= 5h + 5q + 5$

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

$= \frac{5h}{h}$

$= \frac{h(5)}{h}$

$= 5$

$u(q) = 5q + 5$

$u(q+h) = 5(h+q) + 5$

$= 5h + 5q + 10$

$\frac{u(q+h)-u(q)}{h} = \frac{(5h+5q+10)-(5q+5)}{h}$

$= \frac{5h}{h}$

$= \frac{h(5)}{h}$

$= 5$

$u(q) = 5q + 5$

$u(q+h) = 5(h+q) + 5$

$= 5h + 5q + 5$

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

$= \frac{5h}{h}$

$= \frac{h(5)}{h}$

$= 5$

$u(q) = 5q + 5$

$u(q+h) = 5(h+q) + 5$

$= 5h + 5q$

$\frac{u(q+h)-u(q)}{h} = \frac{(5h+5q+15)-(5q+5)}{h}$

$= \frac{5h}{h}$

$= \frac{h(5)}{h}$

$= 5$

Solution