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

$f(q) = 8q + 2$

$f(q) = 8q + 2$

$f(q+h) = 8(h+q) + 2$

$= 8h + 8q + 2$

$\frac{f(q+h) - f(q)}{h} = \frac{(8h+8q+2) - (8(q+1)+2)}{h}$

$= \frac{8h}{h}$

$= \frac{h(8)}{h}$

$= 8$

$f(q) = 8q + 2$

$f(q+h) = 8(h+q) + 2$

$= 8h + 8q + 10$

$\frac{f(q+h) - f(q)}{h} = \frac{(8h+8q+10) - (8q+2)}{h}$

$= \frac{8h}{h}$

$= \frac{h(8)}{h}$

$= 8$

$f(q) = 8q + 2$

$f(q+h) = 8(h+q) + 2$

$= 8h + 8q + 2$

$\frac{f(q+h) - f(q)}{h} = \frac{(8h+8q+2) - (8q+2)}{h}$

$= \frac{8h}{h}$

$= \frac{h(8)}{h}$

$= 8$

$f(q) = 8q + 2$

$f(q+h) = 8(h+q) + 2$

$= 8h + 8q - 6$

$\frac{f(q+h) - f(q)}{h} = \frac{(8h+8q+18) - (8q+2)}{h}$

$= \frac{8h}{h}$

$= \frac{h(8)}{h}$

$= 8$

Solution