$-G^2$ (133)

$$\lim_{h\to 0} \frac{G^2(x+h) - G^2 x}{h} = \lim_{h\to 0} \frac{(Gx+h) - Gx)(Gx+h) + Gx)}{h} =$$

$$\lim_{h\to 0} \frac{-2 \sin\frac{h}{2} \sin(x+\frac{h}{2}) \cdot 2G(x+\frac{h}{2}) G\frac{h}{2}}{h} = \lim_{h\to 0} \frac{-\sin h \sin(2x+h)}{h} =$$

$$\lim_{h\to 0} -\sin(2x+h) = -\sin(2x)$$