$$\lim_{x \to 0} \frac{(x+3)^2 - 9}{2x}$$

$$= \lim_{x \to 0} \frac{x^2 + 9 + 6x - 9}{2x}$$

$$= \lim_{x \to 0} \frac{x^2 + 6x}{2x}$$

$$= \lim_{x \to 0} \frac{x(x+6)}{2x}$$

$$= \lim_{x \to 0} \frac{(x+6)}{2}$$

Applying limit and Put $x = 0$;

$$= \frac{(0+6)}{2}$$

$$= 3.$$