$$n^2\left[f\left(x+\frac{7}{n^2}\right)-f\left(x-\frac{2}{n^2}\right)\right]$$

$$\rightarrow \lim_{n\to\infty} \frac{f\left(x+\frac{7}{n^2}\right)-f\left(x-\frac{2}{n^2}\right)}{\left(\frac{9}{n^2}\right)} \quad \left|\frac{0}{0}\text{ Form}\right.$$

Apply L Hospital rule

$$= \lim_{n\to\infty} \frac{f'\left(x+\frac{7}{n^2}\right)\left(-\frac{14}{n^3}\right)-f'\left(x-\frac{2}{n^2}\right)\left(-\frac{4}{n^3}\right)}{\left(-\frac{2}{n^3}\right)}$$

$$= \lim_{n\to\infty} \frac{14\,f'\left(x+\frac{7}{n^2}\right)-4f'\left(x-\frac{2}{n^2}\right)}{2}$$

$$\lim_{n\to\infty} I_n(x) = \frac{14\,f'(x+0)-4f'(x-0)}{2}$$

$$\lim_{n\to\infty} I_n(5) = \frac{14\,f'(5)-4f'(5)}{2}$$

$$= \frac{14\times 7-4\times 7}{2}$$

$$= 35$$