

[2] Using the given special limit

$$\lim_{x \rightarrow 0} \frac{\sin(x)}{x} = 1$$

Find $\lim_{x \rightarrow 0} \frac{\sin(7x)}{3x}$

[3] Find $\lim_{x \rightarrow 25} \frac{\sqrt{x} - 5}{x - 25}$

[4] Let $f(x) = -x^2 + 6x$. Find the limit of the *difference quotient*.

$$\lim_{h \rightarrow 0} \frac{f(1+h) - f(1)}{h}$$