

Find  $\lim_{x \rightarrow 0} \frac{\sin 7x}{6x}$ .

Angle (radian measure)	$\frac{\sin \theta}{\theta}$
1	.841470
.5	.958851
.05	.999583
.005	.999999
-.05	.999583
-.005	.999999

$$\lim_{\theta \rightarrow 0} \frac{\sin \theta}{\theta} = 1$$

$$\lim_{x \rightarrow 0} \frac{\sin 7x}{6x}$$

$$= \lim_{x \rightarrow 0} \frac{7}{6} \cdot \frac{\sin 7x}{7x} \rightarrow 1$$

$$= \frac{7}{6}$$