

Evaluating Limits

Evaluate each limit.

1)
$$\lim_{x \rightarrow 0} \frac{1 - \sin\left(\frac{\pi}{2} - x\right)}{x}$$

2)
$$\lim_{x \rightarrow 0} \frac{\cos\left(\frac{\pi}{2} - x\right)}{x}$$

3)
$$\lim_{x \rightarrow 0} \frac{\tan(x)}{3x}$$

4)
$$\lim_{x \rightarrow 0} \frac{\sin(x)}{\sin(4x)}$$

5)
$$\lim_{x \rightarrow 0} \frac{1 - \cos(2x)}{4x}$$

6)
$$\lim_{x \rightarrow 0} \frac{\sin^2(2x)}{x^2}$$

Evaluating Limits

Evaluate each limit.

1)
$$\lim_{x \rightarrow 0} \frac{1 - \sin\left(\frac{\pi}{2} - x\right)}{x}$$

0

2)
$$\lim_{x \rightarrow 0} \frac{\cos\left(\frac{\pi}{2} - x\right)}{x}$$

1

3)
$$\lim_{x \rightarrow 0} \frac{\tan(x)}{3x}$$

 $\frac{1}{3}$

4)
$$\lim_{x \rightarrow 0} \frac{\sin(x)}{\sin(4x)}$$

 $\frac{1}{4}$

5)
$$\lim_{x \rightarrow 0} \frac{1 - \cos(2x)}{4x}$$

0

6)
$$\lim_{x \rightarrow 0} \frac{\sin^2(2x)}{x^2}$$

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