

L'Hopital Chapter 4 Test 1 Review

Find the limit of each:

1. $\lim_{w \rightarrow -4} \frac{\sin(\pi w)}{w^2 - 16}$

2. $\lim_{t \rightarrow \infty} \frac{\ln(3t)}{t^2}$

3. $\lim_{w \rightarrow 0^+} [w^2 \ln(4w^2)]$

4. $\lim_{x \rightarrow \infty} \frac{x}{\sqrt{x^2 + 1}}$

5. $\lim_{x \rightarrow 0^+} \sqrt{x} \ln(x)$

6. $\lim_{b \rightarrow 0} \frac{3b}{\ln(b+1)}$

Answers:

1. $-\pi/8$

2. 0

3. 0

4. 1

5. 0

6. 3