

## SECTION 4.4: INDETERMINATE FORMS REFERENCE SHEET

Indeterminate form	technique	NOT indeterminate forms	limit
$\frac{0}{0}$	Algebra; L'H if necessary	$\infty + \infty, -\infty - \infty$	$\infty$ or $-\infty$ (as appropriate)
$\frac{\infty}{\infty}$	Algebra; L'H if necessary	$1^0$	1
$\infty - \infty$	algebra to rewrite as $\frac{0}{0}$ or $\frac{\infty}{\infty}$	$\frac{1}{\infty}$	0
$0 \cdot \infty$	algebra to rewrite as $\frac{0}{0}$ or $\frac{\infty}{\infty}$	$\pm\infty \cdot \pm\infty$	$\pm\infty$
$1^\infty$	Use logs to transform	$\frac{1}{0}$	$\infty$
$0^0$	Use logs to transform	$0^\infty$	0
$\infty^0$	Use logs to transform	$\infty^\infty$	$\infty$