

## Odd One Out

In this activity, students are presented with the sheet below consisting of rows of 3 logarithms and a blank box. Each set of three logarithms has an odd one out. Students are required to decide which statement is the odd-one-out. Students then write, in the empty box, a statement that matches the odd-one-out.

This activity could be completed one strip at a time comparing solutions after each example or altogether assessing their work together on completion.

The statements used in this activity extend the rules of logarithms by including algebra.

Odd One Out

$\log_2 8$	$\log_3 9$	$\log_4 64$	
$\log_2 0.5$	$\log_4 0.25$	$\log_8 0.5$	
$\log_9 3$	$\log_{10} 100$	$\log_7 49$	

$\log_2 8^3$	$\log_2 4^4$	$\log_2 2^9$	
$\log_2 x^6$	$\log_2 x^2$ $+ \log_2 x^3$	$\log_2 x^2$ $+ \log_2 x^4$	
$-2\log_2 x$	$\log_2 \frac{1}{x^2}$	$\log_2 \sqrt{x}$	