## Indices

M.I. Nelson

School of Mathematics \& Applied Statistics, University of Wollongong, AUSTRALIA.

## Exercise 1.3.2 Page 1

Simplify the following.

$$
\begin{array}{r}
8^{1 / 3}= \\
\sqrt[3]{8}= \\
8^{1 / 2}= \\
(-27)^{1 / 3}= \\
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\end{array}
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(a-b)^{-1} & =(a-b)^{-1} .
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## Exercise 1.3.2 Page 2

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\begin{aligned}
\left(a^{2}+b^{2}\right)^{1 / 2} & = \\
a^{1 / 2}+b^{1 / 2} & = \\
\left(a+a^{-1}\right)^{-1} & =
\end{aligned}
$$

Choose two sets of values for $a$ and $b$
Let $a=$ and $b=$ $\qquad$ .
Let $a=\ldots$ and $b=$
Check your results above using the sets of values for $a$ and $b$.

What values of $a$ and $b$ can't you use in these expressions?

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