Exponentials

Study Development Worksheet

## Example

Simplify:

## Answer

Simplify the left-hand side using index laws:

Divide both sides by

Then, use index laws again to simplify the left-hand side:

.

## Questions

1. Simplify:
2. Solve for
   1. = 4

Exponentials

Study Development Worksheet

1. Differentiate:
   1. =

Exponentials

Study Development Worksheet

## Answers

1. Using index laws:
2. = =
3. cannot be simplified any further
4. Using index laws and logarithms:
5. =

Exponentials

Study Development Worksheet

1. Using the fact that :

**Support**: Study Development offers workshops, short courses, 1 to 1 and small group tutorials.

* Join a tutorial or workshop on the [Study Development tutorial and workshop webpage](https://www.yorksj.ac.uk/students/study-skills/study-development-tutorials/) or search ‘YSJ study development tutorials.’
* Access our Study Success resources on the [Study Success webpage](https://www.yorksj.ac.uk/students/study-skills/study-success/) or search ‘YSJ study success.’