



## Exponents

You need to know that the general rules have to be used in both directions. So

$$\frac{1}{\text{something}^p} = \text{something}^{-p}$$

$$\frac{1}{2^5} = 2^{-5}$$

$$\frac{3}{5^2} = 3 \cdot \frac{1}{5^2} = 3 \cdot 5^{-2}$$

$$\frac{x}{y^3} = x \cdot \frac{1}{y^3} = x \cdot y^{-3}$$

Same for:

$$1 = \text{something}^0$$

(except zero itself)

$$1 = 12^0$$

$$1 = x^0$$

$$1 = \text{whatever}^0$$

(except zero itself)