

Indices and Laws of Indices

Without using calculator find the value of:

Watch a video

$$\left(\frac{1}{2}\right)^2 = \text{---} \quad \left(\frac{1}{4}\right)^2 = \text{---} \quad \left(\frac{1}{2}\right)^3 = \text{---} \quad \left(\frac{1}{3}\right)^2 = \text{---}$$

$$\left(\frac{2}{5}\right)^2 = \text{---} \quad \left(\frac{2}{5}\right)^3 = \text{---} \quad \left(\frac{1}{4}\right)^3 = \text{---} \quad \left(\frac{3}{4}\right)^2 = \text{---}$$

Write following expressions using an index:

$$2 \times 2 \times 2 =$$

$$2 \times 2 =$$

$$5 \times 5 =$$

$$3 \times 3 \times 3 =$$

$$6 \times 6 =$$

$$7 \times 7 =$$

$$a \times a \times a \times a =$$

$$(xy) \times (xy) =$$

$$\left(\frac{a}{b}\right) \times \left(\frac{a}{b}\right) \times \left(\frac{a}{b}\right) = \left(\text{---}\right)$$

$$a \times a \times b \times b =$$

$$a \times b \times b =$$

$$\left(\frac{x}{y}\right) \times \left(\frac{x}{y}\right) = \left(\text{---}\right)$$

$$3 \times 3 \times 3 =$$

$$a \times a \times b =$$

$$2 \times 9 \times 9 \times 9 \times 9 \times 9 \times 2 \times 2 =$$

$$7 \times 3 \times 7 \times 7 \times 3 =$$

$$2 \times 2 =$$

$$5 \times 5 \times 5 \times 7 \times 7 \times 7 \times 2 \times 2 =$$

$$z \times z \times z \times a =$$

$$9 \times 9 =$$

$$5 \times 5 \times 5 \times 7 \times 7 \times 7 \times 2 \times 2 =$$

$$5 \times 5 \times 2 =$$

$$5 \times 5 =$$

$$c \times c \times b =$$

$$8 \times 8 \times 8 =$$

$$9 \times 9 \times 9 \times 2 \times 2 =$$

$$6 \times 6 \times 7 \times 7 \times 3 =$$

$$2 \times 3 \times 3 =$$

$$a \times a \times b =$$

$$8 \times 7 \times 9 \times 7 \times 9 \times 7 \times 2 \times 8 =$$