

Zero and Negative exponents:

Recall from our previous lesson:

One and zero exponents

Look for a pattern in the following:

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

$$2 \times 2 \times 2 \times 2 = 2^4$$

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

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

$$2 = 2^1$$

$$1 = 2^0$$

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What does a negative exponent do?

Example 1: Evaluate

1) 2^{-2}

2) $\left(\frac{4}{5}\right)^{-2}$

3) $\frac{2}{3^0}$