

Negative Exponent Property

$$a^{-m} = \frac{1}{a^m}$$

A negative exponent represents the reciprocal of a number or variable. It does NOT make a number or variable negative.

Examples

$$1. \quad 5^{-2} = \frac{1}{5^2} = \frac{1}{25}$$

$$2. \quad x^{-6} = \frac{1}{x^6}$$

$$3. \quad m^5 n^{-7} = \frac{m^5}{n^7}$$

$$4. \quad 4x^{-3} = \frac{4}{x^3}$$

Try These

$$1. \quad (-3)^{-2}$$

1. _____

$$2. \quad 4^{-3}$$

2. _____

$$3. \quad m^{-8}$$

3. _____

$$4. \quad -5b^{-4}$$

4. _____

$$5. \quad x^{-2}y^5$$

5. _____

$$6. \quad 7p^2q^{-6}$$

6. _____

$$7. \quad \frac{1}{y^{-5}}$$

7. _____

$$8. \quad \frac{j^3}{h^{-4}}$$

8. _____

$$9. \quad \frac{1}{6w^{-2}}$$

9. _____