

Lesson 2.5: Exponents with Negative Bases

Targets

1. I understand how exponents work.
2. I can use exponents with negative bases.

Exponents with Negative Bases

First, attempt these problems on your own. Then watch the video and copy the notes.

Your attempt:

$$(-3)^1 =$$

$$(-3)^2 =$$

$$(-3)^3 =$$

$$(neg)^{even} =$$

$$(neg)^{odd} =$$

Video Notes:

$$(-3)^1 =$$

$$(-3)^2 =$$

$$(-3)^3 =$$

$$(neg)^{even} =$$

$$(neg)^{odd} =$$

Patterns in Raising 1 and -1 to Different Powers

First, attempt these problems on your own. Then watch the video and copy the notes.

Your attempt:

$$1^8 =$$

$$1^0 =$$

$$(-1)^0 =$$

$$(-1)^1 =$$

$$(-1)^2 =$$

$$(-1)^3 =$$

$$(-1)^4 =$$

Video Notes:

$$1^8 =$$

$$1^0 =$$

$$(-1)^0 =$$

$$(-1)^1 =$$

$$(-1)^2 =$$

$$(-1)^3 =$$

$$(-1)^4 =$$

Powers of Zero

First, attempt these problems on your own. Then watch the video and copy the notes.

Your attempt:

$$0^1 =$$

$$0^2 =$$

$$0^{(nonzero\ number)} =$$

$$(nonzero\ number)^0 =$$

Video Notes:

$$0^1 =$$

$$0^2 =$$

$$0^{(nonzero\ number)} =$$

$$(nonzero\ number)^0 =$$

Khan Activity: Whole Number Exponents with Integer Bases

Complete this activity on Khan.

Raising a Number to the 0 and 1 Powers

First, attempt these problems on your own. Then watch the video and copy the notes.

Your attempt:

$$(-2)^3 =$$

$$2^0 =$$

$$2^1 =$$

$$2^2 =$$

$$2^3 =$$

Video Notes:

$$(-2)^3 =$$

$$2^0 =$$

$$2^1 =$$

$$2^2 =$$

$$2^3 =$$

Khan Activity: Whole Number Exponents with Integer Bases 2

Complete this activity on Khan.

Exit Ticket

1. Have all your notes filled out above.
2. Complete the following Khan Academy Activities: **Whole Number Exponents with Integer Bases**
3. Complete the following Khan Academy Activities: **Whole Number Exponents with Integer Bases 2**