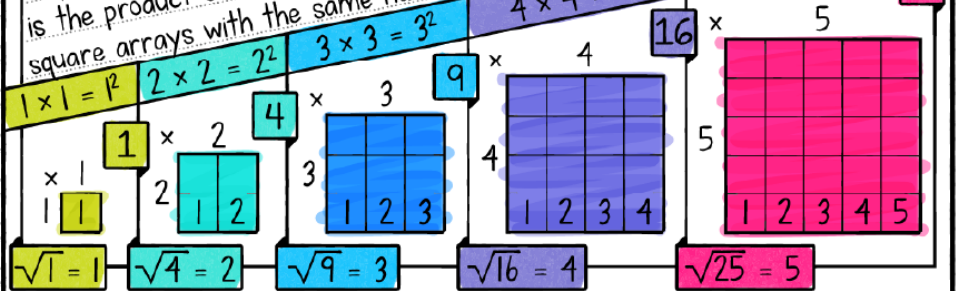


MATH SKETCH NOTES

PERFECT SQUARES *and* SQUARE ROOTS (10)

PERFECT SQUARES

A perfect square is the product of two equal integers. They create square arrays with the same number of rows and columns.



SQUARE ROOTS

A square root is two equal factors of a number. Use a radical symbol ($\sqrt{\quad}$) to denote.

radical symbol

Radicand:
The number
under the
radical symbol

WORD FORM

When you see the radical symbol, read/write:

"The square root of..."

When you see the radicand, read/write:

one, four, nine, sixteen..."

SQUARING A NUMBER

IF $X^2 = X \cdot X = Y$

THEN $\sqrt{Y} = \sqrt{X \cdot X} = X$

TAKING THE SQUARE ROOT OF A NUMBER

"Squaring" and "taking the square root" are inverse, opposite operations.

IF $5^2 = 5 \cdot 5 = 25$	THEN $\sqrt{25} = \sqrt{5 \cdot 5} = 5$
IF $6^2 = 6 \cdot 6 = 36$	THEN $\sqrt{36} = \sqrt{6 \cdot 6} = 6$
IF $7^2 = 7 \cdot 7 = 49$	THEN $\sqrt{49} = \sqrt{7 \cdot 7} = 7$
IF $8^2 = 8 \cdot 8 = 64$	THEN $\sqrt{64} = \sqrt{8 \cdot 8} = 8$

GRADE 6

STEP-BY-STEP POWERPOINT

PERFECT SQUARES and SQUARE ROOTS (10)

PERFECT SQUARES

A perfect square is the product of two equal integers. They create square arrays with the same number of rows and columns.

$2 \times 2 = 2^2$ $3 \times 3 = 3^2$ $4 \times 4 = 4^2$ $5 \times 5 = 5^2$

$2^2 = 4$ $3^2 = 9$ $4^2 = 16$ $5^2 = 25$

WORD FORM

When you see the radical symbol, read/write: "The square root of..."

When you see the radicand, read/write: one, four, nine, sixteen...

TAKING THE SQUARE ROOT OF A NUMBER

IF $5^2 = 5 \cdot 5 = 25$ THEN $\sqrt{25} = \sqrt{5 \cdot 5} = 5$

IF $6^2 = 6 \cdot 6 = 36$ THEN $\sqrt{36} = \sqrt{6 \cdot 6} = 6$

IF $7^2 = 7 \cdot 7 = 49$ THEN $\sqrt{49} = \sqrt{7 \cdot 7} = 7$

IF $8^2 = 8 \cdot 8 = 64$ THEN $\sqrt{64} = \sqrt{8 \cdot 8} = 8$

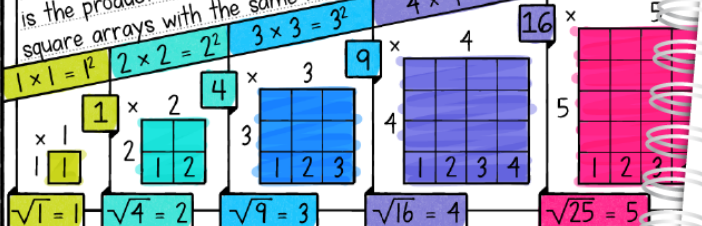
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PERFECT SQUARES and SQUARE ROOTS (10)

PERFECT SQUARES

A perfect square is the product of two equal integers. They create square arrays with the same number of rows and columns.



SQUARE ROOTS

A square root is two equal factors of a number. Use a radical symbol ($\sqrt{\quad}$) to denote.

radical symbol

Radicand:
The number under the radical symbol

WORD FORM

When you see radical symbols read/write:
"The square root of..."

PERFECT SQUARES and SQUARE ROOTS (10)

PERFECT SQUARES

A perfect square is the product of two equal integers. They create square arrays with the same number of rows and columns.



SQUARE ROOTS

A square root is two equal factors of a number.

radical symbol

Radicand:

WORD FORM

When you see...

2 SIZES: STANDARD US 8.5 × 11 & COMPOSITION NOTEBOOK



squaring and "taking the square root" are inverse, opposite operations.

IF $5^2 = 5 \cdot 5 = 25$	THEN $\sqrt{25} = 5$
IF $6^2 = 6 \cdot 6 = 36$	THEN $\sqrt{36} = 6$
IF $7^2 = 7 \cdot 7 = 49$	THEN $\sqrt{49} = 7$
IF $8^2 = 8 \cdot 8 = 64$	THEN $\sqrt{64} = 8$

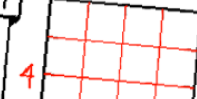
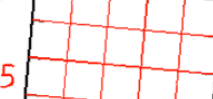
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IF $6 \cdot 6 = 36$	THEN $\sqrt{36} = 6$
IF $7 \cdot 7 = 49$	THEN $\sqrt{49} = 7$
IF $8 \cdot 8 = 64$	THEN $\sqrt{64} = 8$

PERFECT SQUARES and SQUARE ROOTS (10)

PERFECT SQUARES

A perfect square is the product of two equal integers. They create square arrays with the same number of rows and columns.

$1 \times 1 = 1^2$	$2 \times 2 = 2^2$	$3 \times 3 = 3^2$	$4 \times 4 = 4^2$	$5 \times 5 = 5^2$
				
$\sqrt{1} = 1$	$\sqrt{4} = 2$	$\sqrt{9} = 3$	$\sqrt{16} = 4$	$\sqrt{25} = 5$

SQUARE ROOTS

A square root is two equal factors. Use a radical symbol to denote.

DETAILED ANSWER KEY

IF $X^2 = Y$ THEN $\sqrt{Y} = \sqrt{X \cdot X} = X$

one, four, nine, sixteen...

TAKING THE SQUARE ROOT OF A NUMBER

"Squaring" and "taking the square root" are inverse, opposite operations.

IF $5^2 = 5 \cdot 5 = 25$	THEN $\sqrt{25} = \sqrt{5 \cdot 5} = 5$
IF $6^2 = 6 \cdot 6 = 36$	THEN $\sqrt{36} = \sqrt{6 \cdot 6} = 6$
IF $7^2 = 7 \cdot 7 = 49$	THEN $\sqrt{49} = \sqrt{7 \cdot 7} = 7$
IF $8^2 = 8 \cdot 8 = 64$	THEN $\sqrt{64} = \sqrt{8 \cdot 8} = 8$

MATH SKETCH NOTES

MATH SKETCH NOTES

These 6th-grade math sketch notes (AKA doodle pages) are a powerful learning and teaching tool. They cover essential math concepts and procedures for students in a visually appealing way. You can use this resource to supplement any math curriculum, and they are perfect for previewing/pre-teaching or reviewing/reinforcing.

These sketch pages are like mini anchor charts that your students actively create and can be referred to in the future.

WHAT'S INCLUDED:

- Blank student note page
(two sizes: 8.5 x 11 & composition notebook size for INBs)
- Detailed answer key
- Step-by-step PowerPoint

GUIDED NOTE-TAKING

Guiding your students through the note-taking process is so easy and requires almost zero preparation!

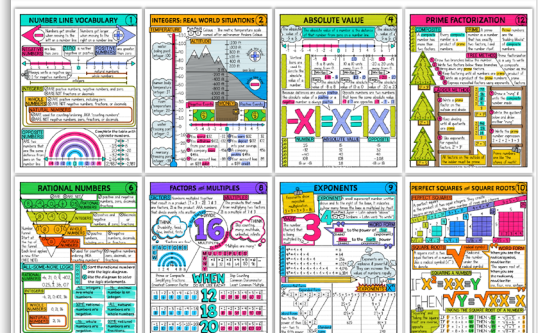
1. PowerPoint: Each sketch note page comes with a step-by-step PowerPoint that you can use to guide your students as they complete their notes.
2. Document Camera: Use a document camera to project a blank copy of the notes. Use the answer key provided to complete the note page in front of your students.

WHY SKETCH?

Sketch notes present your students with a meaningful and engaging activity they will love. Doodle note-taking activates verbal and visual modalities to capture concepts. The whole brain is absorbed in hearing, synthesizing, and retaining ideas. This high level of engagement helps students retain the content and leaves little room for distraction.

GET THE BUNDLE!!!

SIXTH GRADE MATH GUIDED SKETCH NOTES



GROWING BUNDLE