

# MATH SKETCH NOTES

## MATH SKETCH NOTES

These 4th-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!

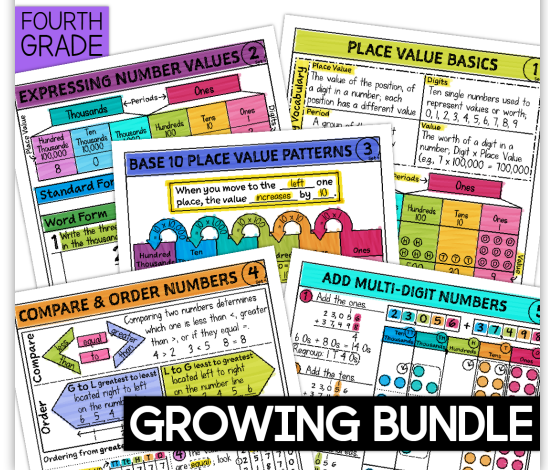
1. PowerPoint: Each sketch note page comes with a step-by-step PowerPoint that you can use to guide your students as they complete their notes.
2. Document Camera: Use a document camera to project a blank copy of the notes. Use the answer key provided to complete the note page in front of your students.

## 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!!!**

## MATH SKETCH NOTES



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## MISSING MEASUREMENTS of RECTANGLES 71 Set 4

### PERIMETER FORMULAS

$P \rightarrow$  perimeter  $\ell \rightarrow$  length  $w \rightarrow$  width

#### Rectangles

$\rightarrow$  [addition]  $P = \ell + \ell + w + w$

$\rightarrow$  [multiplication]  $P = 2\ell + 2w$

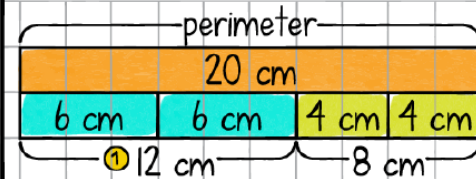


$w = 4 \text{ cm}$

$\ell = 6 \text{ cm}$

$P = 20 \text{ cm}$

#### [Part-to-Whole Model]



②  $20 \text{ cm} - 12 \text{ cm}$     ③  $8 \text{ cm} \div 2$

① Add/multiply what you know.

② Subtract from the whole.

③ Divide by two.

#### [Use a Formula]

①  $12$   

$$\frac{P}{2} = \frac{\ell}{2} + \frac{\ell}{2} + \frac{w}{2} + \frac{w}{2}$$

②  $20 - 12 = 8$     ③  $8 \div 2 = 4$

①  $12$   

$$\frac{P}{2} = (2 \times \frac{\ell}{2}) + (2 \times \frac{w}{2})$$

②  $20 - 12 = 8$     ③  $8 \div 2 = 4$

### AREA FORMULA

$A \rightarrow$  area  $\ell \rightarrow$  length  $w \rightarrow$  width  $A = \ell \times w$

$w = 4 \text{ ft.}$



$\ell = 5 \text{ ft.}$

$A = 20 \text{ ft.}^2$

$$\frac{A}{\ell} = \frac{20}{5} = \frac{4}{1}$$

Think...

What number times 4 equals 20?

or

What is 20 divided by 4?

$w = 6 \text{ m}$



$\ell = 9 \text{ m}$

$A = 54 \text{ m}^2$

$$\frac{A}{\ell} = \frac{54}{9} = \frac{6}{1}$$

Think...

What number times 6 equals 54?

or

What is 54 divided by 6?

**GRADE 4**

## MISSING MEASUREMENTS of RECTANGLES (71)

### PERIMETER FORMULAS

P → perimeter  $\ell$  → length  $w$  → width

rectangles

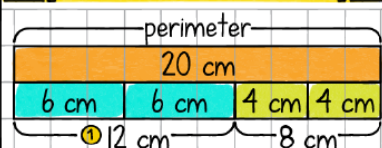
→ [addition]  $P = \ell + \ell + w + w$

→ [multiplication]  $P = 2\ell + 2w$

$w = 4 \text{ cm}$

$\ell = 6 \text{ cm}$   $P = 20$

### [Part-to-Whole Model]



- ②  $20 \text{ cm} - 12 \text{ cm}$  ③  $8 \text{ cm} \div 2$
- ① Add/multiply what you know.
- ② Subtract from the whole.

### [Use a Formula]

① 12

$$\frac{20}{P} = \frac{6}{\ell} + \frac{6}{\ell} + \frac{4}{w} + \frac{4}{w}$$

②  $20 - 12 = 8$  ③  $8 \div 2 = 4$

① 12

$$\frac{20}{P} = (2 \times \frac{6}{\ell}) + (2 \times \frac{4}{w})$$

## MISSING MEASUREMENTS of RECTANGLES (71)

### PERIMETER FORMULAS

P → perimeter  $\ell$  → length  $w$  → width

rectangles

→ [addition]  $P = \ell + \ell + w + w$

→ [multiplication]  $P = 2\ell + 2w$

$w = 4 \text{ cm}$

$\ell = 6 \text{ cm}$   $P = 20 \text{ cm}$

### [Part-to-Whole Model]



- ②  $20 \text{ cm} - 12 \text{ cm}$  ③  $8 \text{ cm} \div 2$
- ① Add/multiply what you know.
- ② Subtract from the whole.

① 12

$$\frac{20}{P} = \frac{6}{\ell} + \frac{6}{\ell} + \frac{4}{w} + \frac{4}{w}$$

②  $20 - 12 = 8$  ③  $8 \div 2 = 4$

① 12

$$\frac{20}{P} = (2 \times \frac{6}{\ell}) + (2 \times \frac{4}{w})$$

2 SIZES: STANDARD US 8.5 × 11  
& COMPOSITION NOTEBOOK



$w = 6 \text{ m}$

$A = 54 \text{ m}^2$

$54 = \frac{9}{\ell} \times \frac{6}{w}$

$\ell = 9 \text{ m}$

Think... What number times 9 equals 54?

$54 = 9 \times 6$

$\ell = 9 \text{ m}$   $A = \ell \times w$

What number times 9 equals 54?

What is 54 divided by 9?

# STEP-BY-STEP POWERPOINT

**MISSING MEASUREMENTS of RECTANGLES 71**

**PERIMETER FORMULAS**  $P \rightarrow$  perimeter  $\ell \rightarrow$  length  $w \rightarrow$  width

rectangles

$\rightarrow$  [addition]  $P = \ell + \ell + w + w$

$\rightarrow$  [multiplication]  $P = 2\ell + 2w$

$w = 4$  cm

$\ell = 6$  cm  $P = 20$  cm

**[Use a Formula]**

$\textcircled{1} 12$

$\frac{20}{P} = \frac{6}{\ell} + \frac{6}{\ell} + \frac{4}{w} + \frac{4}{w}$

$20 - 12 = 8$   $\textcircled{2} 8 \div 2 = 4$

$\textcircled{1} 12$

$\frac{20}{P} = (2 \times \frac{6}{\ell}) + (2 \times \frac{4}{w})$

$20 - 12 = 8$   $\textcircled{2} 8 \div 2 = 4$

**AREA FORMULA**  $A \rightarrow$  area  $\ell \rightarrow$  length  $w \rightarrow$  width  $A = \ell \times w$

$w = 4$  ft.  $A = 20$  ft.<sup>2</sup>

$\ell = 5$  ft.  $\frac{20}{A} = \frac{5}{\ell} \times \frac{4}{w}$

Think... What number times 4 equals 20? or What is 20 divided by 4?

$w = 6$  m  $A = 54$  m.<sup>2</sup>

$\ell = 9$  m  $\frac{54}{A} = \frac{9}{\ell} \times \frac{6}{w}$

Think... What number times 9 equals 54? or What is 54 divided by 9?

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# MISSING MEASUREMENTS of RECTANGLES 71

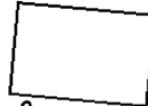
## PERIMETER FORMULAS

P → perimeter  $\ell$  → length  $w$  → width

rectangles

→ [addition]  $P = \ell + \ell + w + w$

→ [multiplication]  $P = 2\ell + 2w$

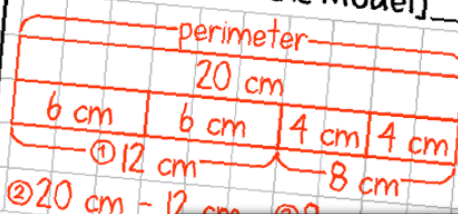


$w = 4 \text{ cm}$

$\ell = 6 \text{ cm}$

$P = 20 \text{ cm}$

[Part-to-Whole Model]



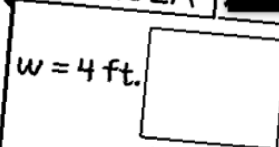
[Use a Formula]

$20 = \frac{6}{\ell} + \frac{6}{\ell} + \frac{4}{w} + \frac{4}{w}$

$20 - 12 = 8$

- ① Add/multiply
- ② Subtract from
- ③ Divide by the

## AREA FORMULA



$w = 4 \text{ ft.}$

$\ell = 5 \text{ ft.}$

$A = 20 \text{ ft.}^2$

$20 = \frac{5}{\ell} \times \frac{4}{w}$

Think...

What number times 4 equals 20?

What is 20 divided by 4?



$w = 6 \text{ m}$

$\ell = 9 \text{ m}$

$A = 54 \text{ m}^2$

$54 = \frac{9}{\ell} \times \frac{6}{w}$

Think...

What number times 9 equals 54?

What is 54 divided by 9?

# DETAILED ANSWER KEY