

MATH SKETCH NOTES

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These 5th-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 × 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!

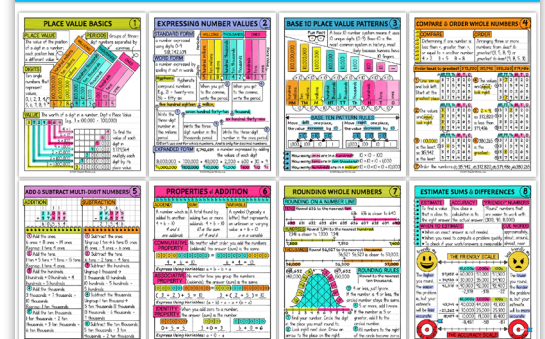
1. PowerPoint: Each sketch note page comes with a step-by-step PowerPoint that you can use to guide your students as they complete their notes.
2. Document Camera: Use a document camera to project a blank copy of the notes. Use the answer key provided to complete the note page in front of your students.

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!!!

FIFTH GRADE MATH GUIDED SKETCH NOTES



GROWING BUNDLE

MATH SKETCH NOTES

ADD *and* SUBTRACT UNLIKE FRACTIONS (40) Set 5

[Standard Algorithm]



ADDITION

① LCD $\begin{cases} 3: 3, 6, 9, (12) \\ 4: 4, 8, (12) 16 \end{cases}$

$$\frac{2}{3} \times \frac{4}{4} = \frac{8}{12} \leftarrow \text{LCD}$$

$$+ \frac{3}{4} \times \frac{3}{3} = \frac{9}{12} \leftarrow \text{LCD}$$

$$\textcircled{4} \div \frac{17}{12} = 12 \overline{)17} \text{ R } 5 = 1 \frac{5}{12}$$



SUBTRACTION

① LCD $\begin{cases} 4: 4, 8, (12) 16 \\ 6: 6, (12) 18, 24 \end{cases}$

$$\frac{3}{4} \times \frac{3}{3} = \frac{9}{12} \leftarrow \text{LCD}$$

$$- \frac{3}{6} \times \frac{2}{2} = \frac{6}{12} \leftarrow \text{LCD}$$

$$\textcircled{4} \text{ GCF } \frac{3}{12} \div \frac{3}{36} = \frac{1}{4}$$

① Find the least common denominator (LCD)

② Multiply to find equivalent fractions with the LCD.

③ Add/Subtract the numerators. The denominator stays the same.

④ Convert to a mixed number and/or simplify (GCF), if possible.

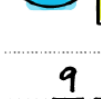
YOUR TURN!

① LCD $\begin{cases} 5: 5, 10, (15) 20, 25 \\ 3: 3, 6, 9, 12, (15) \end{cases}$

$$\frac{4}{5} \times \frac{3}{3} = \frac{12}{15}$$

$$+ \frac{2}{3} \times \frac{5}{5} = \frac{10}{15}$$

$$\frac{22}{15} = 15 \overline{)22} \text{ R } 7 = 1 \frac{7}{15}$$



① LCD $\begin{cases} 10: (10) 20, 30, 40 \\ 2: 2, 4, 6, 8, (10) \end{cases}$

$$\frac{9}{10} \rightarrow \frac{9}{10} \text{ GCF}$$

$$- \frac{1}{2} \times \frac{5}{5} = \frac{5}{10}$$

$$\frac{4}{10} = 2 \overline{)4} \text{ R } 2 = \frac{2}{5}$$

GRADE 5



ADD and SUBTRACT UNLIKE FRACTIONS (40)

[Standard Algorithm] Set 5

+

ADDITION

① LCD: 3: 3, 6, 9, ⑫
4: 4, 8, ⑫, 16

$$\frac{2}{3} \times \frac{4}{4} = \frac{8}{12} \leftarrow \text{LCD}$$

$$+ \frac{3}{4} \times \frac{3}{3} = \frac{9}{12} \leftarrow \text{LCD}$$

$$\begin{array}{r} \frac{8}{12} \\ + \frac{9}{12} \\ \hline \frac{17}{12} = 1\frac{5}{12} \end{array}$$

- ① Find the least common denominator (LCD)
② Multiply to find equivalent fractions
③ Add/Subtract the numerators
④ Convert to mixed numbers if needed

-

SUBTRACTION

① LCD: 4: 4, 8, ⑫
6: 6, ⑫, 18

$$\frac{3}{4} \times \frac{3}{3} = \frac{9}{12} \leftarrow \text{LCD}$$

$$- \frac{3}{6} \times \frac{2}{2} = \frac{6}{12} \leftarrow \text{LCD}$$

$$\begin{array}{r} \frac{9}{12} \\ - \frac{6}{12} \\ \hline \frac{3}{12} = \frac{1}{4} \end{array}$$

- ① Find the least common denominator (LCD)
② Multiply to find equivalent fractions
③ Subtract the numerators
④ Convert to mixed numbers if needed

ADD and SUBTRACT UNLIKE FRACTIONS (40)

[Standard Algorithm] Set 5

+

ADDITION

① LCD: 3: 3, 6, 9, ⑫
4: 4, 8, ⑫, 16

$$\frac{2}{3} \times \frac{4}{4} = \frac{8}{12} \leftarrow \text{LCD}$$

$$+ \frac{3}{4} \times \frac{3}{3} = \frac{9}{12} \leftarrow \text{LCD}$$

$$\begin{array}{r} \frac{8}{12} \\ + \frac{9}{12} \\ \hline \frac{17}{12} = 1\frac{5}{12} \end{array}$$

- ① Find the least common denominator (LCD)
② Multiply to find equivalent fractions
③ Add/Subtract the numerators
④ Convert to mixed numbers if needed

-

SUBTRACTION

① LCD: 4: 4, 8, ⑫
6: 6, ⑫, 18, 24

$$\frac{3}{4} \times \frac{3}{3} = \frac{9}{12} \leftarrow \text{LCD}$$

$$- \frac{3}{6} \times \frac{2}{2} = \frac{6}{12} \leftarrow \text{LCD}$$

$$\begin{array}{r} \frac{9}{12} \\ - \frac{6}{12} \\ \hline \frac{3}{12} = \frac{1}{4} \end{array}$$

- ① Find the least common denominator (LCD)
② Multiply to find equivalent fractions
③ Subtract the numerators
④ Convert to mixed numbers if needed

2 SIZES: STANDARD US 8.5 × 11
& COMPOSITION NOTEBOOK



$$\frac{2}{3} \times \frac{5}{5} = \frac{10}{15}$$
$$+ \frac{12}{15} = \frac{22}{15} = 1\frac{7}{15}$$

$$\frac{1}{2} \times \frac{5}{5} = \frac{5}{10}$$
$$- \frac{2}{10} = \frac{3}{10}$$

$$\frac{22}{15} = 1\frac{7}{15}$$

$$\frac{4}{10} \div \frac{2}{5} = \frac{1}{1}$$

STEP-BY-STEP POWERPOINT

ADD and SUBTRACT UNLIKE FRACTIONS (40 Sets)

+

ADDITION
LCD: 3: 3, 6, 9, 12
4: 4, 8, 12, 16

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SUBTRACTION
LCD: 4: 4, 8, 12, 16
6: 6, 12, 18, 24

$$\frac{3}{4} \times \frac{3}{3} = \frac{9}{12}$$

$$\frac{2}{3} \times \frac{2}{2} = \frac{4}{6}$$

$$\frac{3}{12} + \frac{4}{12} = \frac{7}{12}$$

$$\frac{3}{12} - \frac{4}{12} = \frac{-1}{12}$$

$$\frac{3}{12} \div \frac{3}{12} = \frac{1}{4}$$

$$\frac{3}{12} \div \frac{4}{12} = \frac{3}{4}$$

$$\frac{3}{12} \div \frac{6}{12} = \frac{1}{2}$$

$$\frac{3}{12} \div \frac{8}{12} = \frac{3}{8}$$

$$\frac{3}{12} \div \frac{10}{12} = \frac{3}{10}$$

$$\frac{3}{12} \div \frac{12}{12} = \frac{1}{4}$$

$$\frac{3}{12} \div \frac{14}{12} = \frac{3}{14}$$

$$\frac{3}{12} \div \frac{16}{12} = \frac{3}{16}$$

$$\frac{3}{12} \div \frac{18}{12} = \frac{1}{6}$$

$$\frac{3}{12} \div \frac{20}{12} = \frac{3}{20}$$

YOUR TURN!

LCD: 5: 5, 10, 15, 20, 25
3: 3, 6, 9, 12, 15

$$\frac{4}{5} \times \frac{3}{3} = \frac{12}{15}$$

$$\frac{2}{3} \times \frac{5}{5} = \frac{10}{15}$$

$$\frac{12}{15} + \frac{10}{15} = \frac{22}{15}$$

$$\frac{22}{15} = 1 \frac{7}{15}$$

+

-

LCD: 10: 10, 20, 30, 40
2: 2, 4, 6, 8, 10

$$\frac{9}{10} \rightarrow \frac{9}{10}$$

$$\frac{1}{2} \times \frac{5}{5} = \frac{5}{10}$$

$$\frac{9}{10} - \frac{5}{10} = \frac{4}{10}$$

$$\frac{4}{10} \div \frac{2}{10} = \frac{2}{5}$$

$$\frac{4}{10} \div \frac{4}{10} = \frac{1}{5}$$

$$\frac{4}{10} \div \frac{6}{10} = \frac{2}{3}$$

$$\frac{4}{10} \div \frac{8}{10} = \frac{1}{2}$$

$$\frac{4}{10} \div \frac{10}{10} = \frac{2}{5}$$

$$\frac{4}{10} \div \frac{12}{10} = \frac{2}{3}$$

$$\frac{4}{10} \div \frac{14}{10} = \frac{2}{7}$$

$$\frac{4}{10} \div \frac{16}{10} = \frac{1}{4}$$

$$\frac{4}{10} \div \frac{18}{10} = \frac{2}{9}$$

$$\frac{4}{10} \div \frac{20}{10} = \frac{2}{5}$$

$$\frac{4}{10} \div \frac{22}{10} = \frac{2}{11}$$

$$\frac{4}{10} \div \frac{24}{10} = \frac{1}{3}$$

$$\frac{4}{10} \div \frac{26}{10} = \frac{2}{13}$$

ADD and SUBTRACT UNLIKE FRACTIONS (40)

[Standard Algorithm] Set 5



ADDITION

① LCD $\begin{cases} 3: 3, 6, 9, \textcircled{12} \\ 4: 4, 8, \textcircled{12}, 16 \end{cases}$

$$\frac{2}{3} \times \frac{\textcircled{4}}{\textcircled{4}} = \frac{8}{12} \leftarrow \text{LCD}$$

$$+ \frac{3}{4} \times \frac{\textcircled{3}}{\textcircled{3}} = \frac{9}{12} \leftarrow \text{LCD}$$

$$\textcircled{4} \div \frac{17}{12} = \frac{17}{12} \times \frac{12}{17} = \frac{5}{12}$$



SUBTRACTION

① LCD $\begin{cases} 4: 4, 8, \textcircled{12}, 16 \\ 6: 6, \textcircled{12}, 18, 24 \end{cases}$

$$\frac{3}{4} \times \frac{\textcircled{3}}{\textcircled{3}} = \frac{9}{12} \leftarrow \text{LCD}$$

$$- \frac{3}{6} \times \frac{\textcircled{2}}{\textcircled{2}} = \frac{6}{12} \leftarrow \text{LCD}$$

$$\textcircled{4} \text{ GCF } \frac{3}{12} \div \frac{3}{12} = 1$$

① Find the least common denominator (LCD)

YOUR TURN:

LCD $\begin{cases} 5: 5, 10, \textcircled{15}, 20, 25 \\ 3: 3, 6, 9, 12, \textcircled{15} \end{cases}$

$$\frac{4}{5} \times \frac{\textcircled{3}}{\textcircled{3}} = \frac{12}{15}$$

$$+ \frac{2}{3} \times \frac{\textcircled{5}}{\textcircled{5}} = \frac{10}{15}$$

$$\frac{22}{15} = \frac{17}{15} \times \frac{7}{7} = \frac{7}{15}$$



LCD $\begin{cases} 10: \textcircled{10}, 20, 30, 40 \\ 2: 2, 4, 6, 8, \textcircled{10} \end{cases}$

$$\frac{9}{10} \rightarrow \frac{9}{10}$$

$$- \frac{1}{2} \times \frac{\textcircled{5}}{\textcircled{5}} = \frac{5}{10}$$

$$\frac{4}{10} \div \frac{2}{2} = \frac{1}{5}$$

GCF

$$\begin{array}{r} 2 \overline{) 210} \\ \underline{15} \end{array}$$