

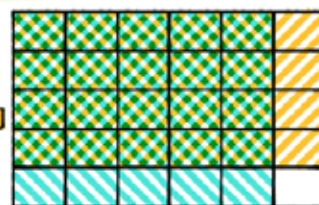
MATH SKETCH NOTES

REVIEW: MULTIPLY FRACTIONS

17
Set 6

AREA
MODEL
REVIEW

$$\frac{5}{6} \times \frac{4}{5}$$



$$= \frac{20}{30} = \frac{2}{3}$$

GCF: 10
 $\frac{20 \div 10}{30 \div 10} = \frac{2}{3}$

① 1st factor; partition the rectangle vertically to match the denominator. Shade in the numerator.

② 2nd factor; partition the rectangle horizontally to match the denominator. Shade in the numerator.

③ The overlapping shaded area is the product. Simplify, if possible.

$$\frac{n}{d} \times \frac{n}{d}$$

CROSS
SIMPLIFYING

What Simplifying a multiplication problem that has fractions

Why

★ It makes numbers smaller, so they are easier to multiply.

★ The product will be in simplest form, or near simplest form.

How

$$\begin{array}{l} 1 \times 2 \\ \text{GCF of } 5 \text{ \& } 5 \rightarrow 5 \quad \frac{5}{5} \times \frac{4}{5} = \frac{2}{3} \\ \text{GCF of } 6 \text{ \& } 4 \rightarrow 2 \quad \frac{5}{3} \times \frac{4}{5} = \frac{2}{3} \\ 3 \times 1 \end{array}$$



- ① Find the GCF of a numerator & a denominator. They don't have to be from the same fraction.
- ② Divide the numbers by the GCF.
- ③ Repeat steps 1 & 2, if possible.
- ④ Multiply as usual.

STANDARD ALGORITHM

$$\frac{5}{6} \times \frac{4}{5} = \frac{20}{30} = \frac{2}{3}$$

- ① Multiply the numerators.
- ② Multiply the denominators.
- ③ Simply, if possible.

METHOD 1

1st Multiply the factors.
2nd Simplify the product.

$$\frac{3}{8} \times \frac{4}{9} = \frac{12}{72} = \frac{1}{6}$$

METHOD 2

1st Simplify the factors.
2nd Multiply the factors

GRADE 6

$$2 \times 3$$

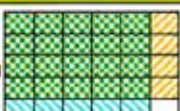
STEP-BY-STEP POWERPOINT

REVIEW: MULTIPLY FRACTIONS

17

AREA
MODEL
REVIEW

$$\frac{5}{6} \times \frac{4}{5}$$



$$\frac{5}{6} \times \frac{4}{5} = \frac{20}{30} = \frac{2}{3}$$

1. The overlapping shaded area is the product. Simplify, if possible.

STANDARD ALGORITHM

$$\frac{5}{6} \times \frac{4}{5} = \frac{20}{30} = \frac{2}{3}$$

1. Multiply the numerators.
2. Multiply the denominators.
3. Simplify, if possible.

METHOD 1

$$\frac{5}{6} \times \frac{4}{5} = \frac{20}{30} = \frac{2}{3}$$

METHOD 2

$$\frac{5}{6} \times \frac{4}{5} = \frac{20}{30} = \frac{2}{3}$$

smaller, so they are easier to multiply. in simplest form, or near simplest form.

How?

GCF of 5 & 5 $\rightarrow 5$ $\frac{5}{6} \times \frac{4}{5} = \frac{2}{3}$
 GCF of 6 & 4 $\rightarrow 2$ $\frac{5}{6} \times \frac{4}{5} = \frac{2}{3}$
 3×1

1. Find the GCF of a numerator & a denominator. They don't have to be from the same fraction.
2. Divide the numbers by the GCF.
3. Repeat steps 1 & 2, if possible.
4. Multiply as usual.

©2008 TeacherTina.com

MacBook Pro

REVIEW: MULTIPLY FRACTIONS

17
Set 6

AREA
MODEL
REVIEW

$$\frac{5}{6} \times \frac{4}{5}$$



$$= \frac{20}{30} = \frac{2}{3}$$

① 1st factor; partition the rectangle vertically to match the denominator. Shade in the numerator.

② 2nd factor; partition the rectangle horizontally to match the denominator. Shade in the numerator.

③ The overlapping shaded area is the product. Simplify, if possible.

$$\frac{n}{d} \times \frac{n}{d}$$

CROSS SIMPLIFYING
What? Simplifying a multiplication problem that has fractions

STANDARD ALGORITHM
 $\frac{5}{6} \times \frac{4}{5} = \frac{20}{30} = \frac{2}{3}$
① Multiply the numerators
② Multiply the denominators
③ Simplify, if possible

REVIEW: MULTIPLY FRACTIONS

17
Set 6

AREA
MODEL
REVIEW

$$\frac{5}{6} \times \frac{4}{5}$$



$$= \frac{20}{30} = \frac{2}{3}$$

① 1st factor; partition the rectangle vertically to match the denominator. Shade in the numerator.

② 2nd factor; partition the rectangle horizontally to match the denominator. Shade in the numerator.

③ The overlapping shaded area is the product. Simplify, if possible.

$$\frac{n}{d} \times \frac{n}{d}$$

CROSS SIMPLIFYING
What? Simplifying a multiplication problem that has fractions

STANDARD ALGORITHM
 $\frac{5}{6} \times \frac{4}{5} = \frac{20}{30} = \frac{2}{3}$
① Multiply the numerators
② Multiply the denominators
③ Simplify, if possible

2 SIZES: STANDARD US 8.5 × 11 & COMPOSITION NOTEBOOK



② Divide the numbers by the GCF.
③ Repeat steps 1 & 2, if possible.
④ Multiply as usual.

GCF 3 $\frac{3}{8} \times \frac{9}{4} = \frac{27}{32}$
GCF 8 $\frac{8}{8} \times \frac{4}{4} = \frac{32}{32} = 1$

③ Repeat steps 1 & 2, if possible.
④ Multiply as usual.
GCF 3 $\frac{3}{8} \times \frac{9}{4} = \frac{27}{32}$
GCF 8 $\frac{8}{8} \times \frac{4}{4} = \frac{32}{32} = 1$

REVIEW: MULTIPLY FRACTIONS

17
Set 6

AREA
MODEL
REVIEW

$$\frac{5}{6} \times \frac{4}{5}$$



$$\begin{aligned} &\overset{\text{simplify}}{=} \frac{20}{30} \overset{\text{GCF: 10}}{\div 10} = \frac{2}{3} \end{aligned}$$

① 1st factor; partition the rectangle vertically to match the denominator. Shade in the numerator.

② 2nd factor; partition the rectangle horizontally to match the denominator. Shade in the numerator.

③ The overlapping shaded area is the product. Simplify, if possible.

$$\frac{n}{d} \times \frac{n}{d}$$

CROSS
SIMPLIFYING

STANDARD ALGORITHM

DETAILED ANSWER KEY

[Why]
★ It makes num smaller, so they easier to multiply

[How]

$$\begin{aligned} &\text{GCF of 5 \& 5} \rightarrow 5 \quad 1 \times 2 \\ &\text{GCF of 6 \& 4} \rightarrow 2 \quad \frac{5}{6} \times \frac{4}{5} = \frac{2}{3} \quad 3 \times 1 \end{aligned}$$

- ① Find the GCF of a numerator & a denominator. They don't have to be from the same fraction.
- ② Divide the numbers by the GCF.
- ③ Repeat steps 1 & 2, if possible.
- ④ Multiply as usual.

$$\begin{aligned} &1^{\text{st}} \text{ Multiply the factors.} \\ &2^{\text{nd}} \text{ Simplify the product.} \\ &\frac{3}{8} \times \frac{4}{9} = \frac{12}{72} \div \frac{12}{12} = \frac{1}{6} \end{aligned}$$

METHOD 2

$$\begin{aligned} &1^{\text{st}} \text{ Simplify the factors.} \\ &2^{\text{nd}} \text{ Multiply the factors.} \\ &\text{GCF (3 \& 9)} = 3 \quad 1 \times 1 \\ &\text{GCF (8 \& 4)} = 4 \quad \frac{3}{8} \times \frac{4}{9} = \frac{1}{6} \quad 2 \times 3 \end{aligned}$$

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!

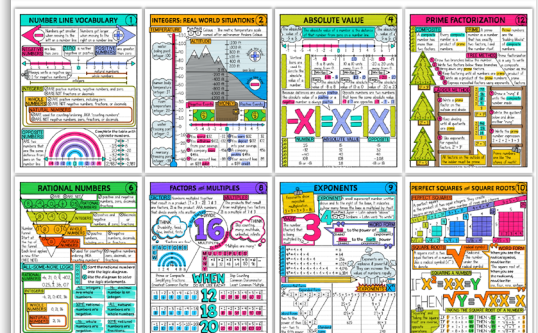
1. PowerPoint: Each sketch note page comes with a step-by-step PowerPoint that you can use to guide your students as they complete their notes.
2. Document Camera: Use a document camera to project a blank copy of the notes. Use the answer key provided to complete the note page in front of your students.

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