WarmUp

Find the product.

7. $8 \cdot 12 =$ _____ **8.** $15 \times 12 =$ _____ **9.** $(13)(20) =$ _____

11. $13 \times 6 =$ _____ **12.** $(11)(8) =$ _____ **13.** $19 \cdot 21 =$ _____

15. $0 \cdot 114 =$ _____ **16.** $26 \times 1 =$ _____ **17.** $4 \cdot 10 \cdot 8 =$ _____

EssentialQuestion

What does it mean to mulply fracons?

LessonTarget

To be able to:

- use a visual model and a formal process for mulplying fracons.

Score	Description
4	I can teach other students how to use a visual model and a formal process for mulplying fracons.
3	I can use a visual model and a formal process for mulplying fracons.
2	I recognize a visual model and a formal process for mulplying fracons.
1	I do not know how to use a visual model and a formal process for mulplying fracons.

Activity1

With a partner, complete Acvity 1
on page 31 in your Big Ideas Record
and Pracce Journal.

Activity2

With a partner, complete Acvity 2
on page 32 in your Big Ideas Record
and Pracce Journal.

1 Multiplying Fractions

Find $\frac{1}{5} \times \frac{1}{3}$.

$$\frac{1}{5} \times \frac{1}{3} = \frac{1 \times 1}{5 \times 3}$$

Multiply the numerators.

Multiply the denominators.

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

Simplify.

2 Multiplying Fractions with Common Factors

Find $\frac{8}{9} \times \frac{3}{4}$.

Estimate $1 \times \frac{3}{4} = \frac{3}{4}$

$$\frac{8}{9} \times \frac{3}{4} = \frac{8 \times 3}{9 \times 4}$$

Multiply the numerators.

Multiply the denominators.

$$= \frac{\overset{2}{\cancel{8}} \times \overset{1}{\cancel{3}}}{\underset{3}{\cancel{9}} \times \underset{1}{\cancel{4}}}$$

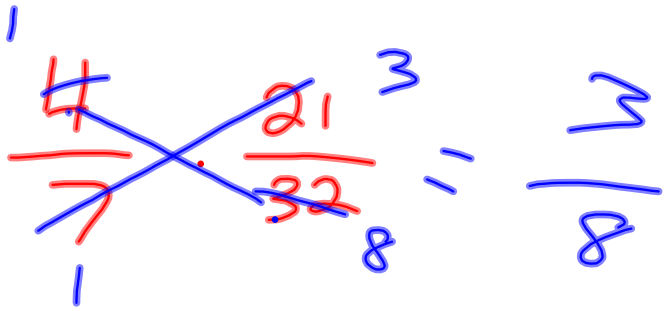
Divide out common factors.

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

Simplify.

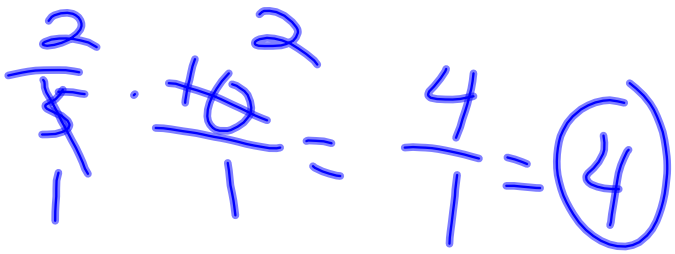
∴ The product is $\frac{2}{3}$.

Reasonable? $\frac{2}{3} \approx \frac{3}{4}$ ✓


1
4
7
21
32
3
8
1
=
3
8

$$\frac{\cancel{4}^{1}}{7} \cdot \frac{\cancel{10}^{5}}{\cancel{16}_{\cancel{4}_{2}}} = \frac{5}{14}$$

MultiplyingFractions byWholeNumbers



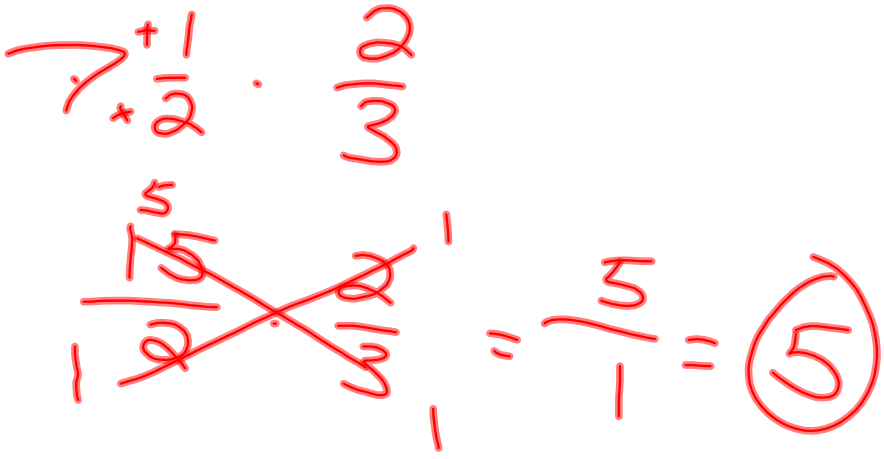
MultiplyingMixedFractions

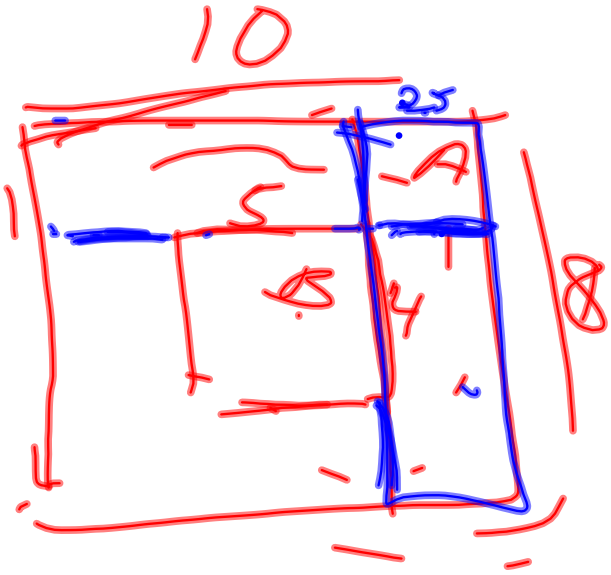
$4\frac{1}{5} \cdot 2\frac{1}{7}$

$\frac{\cancel{21}^{3}}{\cancel{5}_{1}} \cdot \frac{\cancel{7}^{1}}{\cancel{7}_{1}} = \frac{9}{1} = 9$

Assignment

In your Big Ideas text book, do numbers 10 - 14 on page 59 & numbers 30 - 33, 47 - 49, 54 on page 60 & number 56 - 57 on page 61.


7 + 1
+ 2 = 3
2
5
5
5
2
1
2
3
1
1
= 5/1 = 5


10
2.5
5
8

$$1\frac{1}{15} \cdot 5\frac{2}{5} \cdot 4\frac{7}{12}$$

$$\frac{\overset{4}{16}}{\underset{5}{15}} \cdot \frac{\overset{3}{27}}{\underset{1}{5}} \cdot \frac{\overset{11}{55}}{\underset{1}{12}} = \frac{132}{5} = 26\frac{2}{5}$$

EssentialQuestion

What does it mean to mulply fracons?

Score	Description
4	I can teach other students how to use a visual model and a formal process for mulplying fracons.
3	I can use a visual model and a formal process for mulplying fracons.
2	I recognize a visual model and a formal process for mulplying fracons.
1	I do not know how to use a visual model and a formal process for mulplying fracons.

Homework

Big Ideas Record and
Pracce Journal
Page 34