

Mixed Fractions to Improper Review

$$2 \frac{3}{5}$$

$$\downarrow$$

$$2 + \frac{3}{5}$$

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

$$\boxed{= \frac{13}{5}}$$

$$-7 \frac{8}{9}$$

$$-(7 + \frac{8}{9})$$

$$= -\frac{(7 \times 9 + 8)}{9}$$

$$= -\frac{71}{9}$$

$$-11 \frac{3}{4}$$

$$= -\frac{47}{4}$$

BBQ Sauce

- 1/2 cup ketchup
- 1/2 cup brown sauce
- 6 tablespoons lemon juice
- 1/4 cup balsamic vinegar
- 1/4 cup white vinegar
- 1/4 cup Worcestershire sauce
- 2 tablespoons brown sugar
- 1/2 teaspoon dry mustard

Triple the Recipe

1 1/2 or 3/2

1 1/2

18

3/4

3/4

3/4

6

1 1/2



**Find a Common Denominator
by determining the LCM.**

L owest

C ommon

M ultiple

Find a common denominator:

$$\frac{4}{5} \times 3 + \frac{8}{3} \times 5$$

$$= \frac{12}{15} + \frac{40}{15}$$

$$\boxed{= \frac{52}{15}}$$

Multiples

5

3

$5 \times 1 = 5$

$3 \times 1 = 3$

$5 \times 2 = 10$

$3 \times 2 = 6$

$5 \times 3 = 15$

$3 \times 3 = 9$

$5 \times 4 = 20$

$3 \times 4 = 12$

LCM $3 \times 5 = 15$

$$3 \frac{7}{15}$$

$$\frac{3_{\times 3}}{4_{\times 3}} + \frac{-5_{\times 2}}{6_{\times 2}}$$

Find the LCM first!



$$= \frac{9}{12} + \frac{-10}{12}$$

Multiples of 4 and 6:

4	4, 8, 12, 16
6	6, 12, 18

$$= \frac{9 + (-10)}{12} = \boxed{\frac{-1}{12}}$$

What about mixed numbers?

$$2\frac{1}{3} + 2\frac{3}{5}$$

Step 1: Write each mixed number as an improper fraction.

$$\frac{7}{3} + \frac{13}{5}$$

(Note: In the original image, red handwritten annotations show 'x5' above the 7 and 'x3' below the 3 for the first fraction, and 'x3' above the 13 and 'x5' below the 5 for the second fraction.)

Step 2: Find a common denominator, and then add.

$$\frac{35}{15} + \frac{39}{15} = \frac{74}{15}$$

(Note: In the original image, the final fraction 74/15 is enclosed in a red hand-drawn box.)



Practice!

1) $5\frac{7}{8} + (-3\frac{1}{2})$

$$\frac{47}{8} + \left(-\frac{7}{2}\right)$$

$$= \frac{47}{8} + \left(-\frac{28}{8}\right)$$

$$\boxed{-\frac{19}{8}}$$

2) $(-1\frac{2}{3}) + (-2\frac{1}{4})$

$$\left(-\frac{5}{3}\right) + \left(-\frac{9}{4}\right)$$

$$\left(-\frac{20}{12}\right) + \left(-\frac{27}{12}\right)$$

$$\boxed{-\frac{47}{12}}$$

Classwork / Homework: p. 112 - 113
11, 13, 15(a, b), 17, 19(a, b), 20(a)

Subtracting

Think "add the opposite":

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3. Determine each difference.

a) i) $5 - 3$

ii) $5.1 - 3.3$

b) i) $-5 - 3$

ii) $-5.1 - 3.3$

c) i) $-3 - (-5)$

ii) $-3.3 - (-5.1)$

d) i) $3 - 5$

ii) $3.3 - 5.1$

9. Determine each difference.

a) $\frac{17}{3} - \frac{19}{2}$ b) $-\frac{13}{5} - \frac{7}{3}$ c) $1\frac{5}{6} - 6\frac{3}{4}$
d) $-\frac{19}{6} - \frac{7}{8}$ e) $\frac{15}{4} - \frac{5}{12}$ f) $-2\frac{1}{8} - \left(-4\frac{1}{3}\right)$

Your Turn!

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