

18.1 Fraction Addition and Subtraction - Worksheet 1

1 Find the least common multiple of 12 and 28 by writing out multiples of each number and also by applying the technique from this section.

2 Find the least common multiple of 18 and 48 by writing out multiples of each number and also by applying the technique from this section.

3 Calculate $\frac{3}{5} + \frac{7}{8}$.

4 Check the presentation for errors. If you find one, circle it and describe the mistake in words.

$$\begin{aligned}\frac{4}{5} + \frac{3}{7} &= \frac{4}{5} \cdot 7 + \frac{3}{7} \cdot 5 \\ &= \frac{28}{35} + \frac{15}{35} \\ &= \frac{43}{35}\end{aligned}$$

Common denominator

This mistake is due to laziness and sloppiness. But neither of those words explain what is wrong.

18.2 Fraction Addition and Subtraction - Worksheet 2

1

Find the least common multiple of 40 and 72.

2

Find the least common multiple of $6x^2y$ and $9xy^3$.

3

Calculate $\frac{11}{6} - \frac{7}{20}$.

4

Calculate $\frac{3}{x} + \frac{7}{y}$.

18.3 Fraction Addition and Subtraction - Worksheet 3

1

Find the least common multiple of 8 and 32.

Students sometimes feel confused by this one. Trust your reasoning skills. If you're still not sure, try it a second way to confirm or reject your first answer.

2

Find the least common multiple of 8 and $3p^2q$.

Trust yourself. Or at least, trust the process.

3

Calculate $\frac{3a}{4b} + \frac{4b}{3a}$.

4

Calculate $\frac{11}{6} + \frac{7}{20}$.

18.4 Fraction Addition and Subtraction - Worksheet 4

1

Calculate $\frac{13}{8} + \frac{17}{20}$.

2

Calculate $\frac{3x}{8y^2} - \frac{5y}{6x}$.

3

Calculate $\frac{5x}{6y^2} + \frac{8}{10x^2y^3}$.

4

Calculate $\frac{x}{y^2} - \frac{y}{x^3}$.

18.5 Fraction Addition and Subtraction - Worksheet 5

1

Calculate $\frac{7}{8} + \frac{5}{24}$.

2

Calculate $\frac{22}{15} - \frac{3}{35}$.

3

Calculate $\frac{a}{b} + \frac{c}{d}$.

4

In the previous problem, you derived a general formula for adding two fractions together. Apply the formula to calculating $\frac{11}{32} + \frac{23}{48}$ and then explain why it's not a good idea to use the formula in every situation.