

C10 LESSON: FRACTIONS $\frac{A}{B/C}$ + - X \div 1/X

Let's quickly review fractions. Let A and B be two **integers**. Then, A/B is called a **fraction**. If A > B then this fraction is greater than 1 and called **improper**. There are four rules for adding, subtracting, multiplying and dividing fractions you should know.

$$A/B + C/D = (AD + BC)/BD$$

$$A/B - C/D = (AD - BC)/BD$$

$$A/B \times C/D = AC/BD$$

$$(A/B)/(C/D) = A/B \times D/C$$

$$\begin{aligned} 2/3 + 4/5 &= (2 \times 5 + 3 \times 4)/3 \times 5 = (10 + 12)/15 = \\ 22/15 &= 1 \frac{7}{15} \end{aligned}$$

The $\frac{a}{b/c}$ lets you enter the two fractions and add them. Watch the video to see how.

Similarly you can subtract, multiply, and divide two fractions. See the video. **Do the homework.**

The largest denominator you may enter is 999. So, if you should multiply two fractions resulting in a denominator greater than 999, the answer will be in decimal form.

Also, you may apply the other function keys to fractions just like any other number.

C10 Exercise

FRACTIONS $\frac{a}{b/c} + - X \div 1/X$ Answers: []'s

1. $\frac{3}{4} + \frac{7}{8} = ?$ [15/8 = 13/8 = 1.625]

2. $\frac{7}{8} - \frac{2}{3} = ?$ [5/24]

3. $\frac{2}{3} \times \frac{4}{5} = ?$ [8/15]

4. $\frac{5}{6} \div \frac{2}{3} = ?$ [11/4 = 5/4 = 1.25]

5. $-\frac{5}{6} \times \frac{2}{3} = ?$ [-5/9]

6. $-\frac{3}{4} \times -\frac{2}{3} = ?$ [1/2]

7. $1/(\frac{2}{3}) = ?$ [1.5 = 11/2 = 3/2]

8. $(\frac{6}{7})^2 = ?$ [.734693878 = 36/49]

9. $\sqrt{\frac{5}{6}} = ?$ [.91287]

10. What is largest denominator you can enter for a fraction with the TI 30 XA? [999]

11. $\frac{17}{8} + \frac{13}{3} = ?$ [611/24 = 155/24 = 6.46]

12. $\frac{5}{6} \div \frac{7}{9} = ?$ [11/14 = 15/14 = 1.07]

Play with fractions.

C10 Exercise Supplement

FRACTIONS $a^{b/c} + - X \div 1/X$ Answers: []'s

1. $3/7 + 7/8 = ?$ [117/56 = 73/56 = 1.30]

2. $7/8 - 5/6 = ?$ [1/24]

3. $2/3 \times 2/5 = ?$ [4/15]

4. $5/9 \div 2/3 = ?$ [5/6]

5. $-5/6 \times 4/3 = ?$ [-11/9 = -10/9 = -1.11]

6. $-5/4 \times -2/3 = ?$ [5/6]

7. $1/(2/7) = ?$ [3.5 = 3 1/2 = 7/2]

8. $(5/7)^2 = ?$ [25/49 = .51]

9. $\sqrt{4/7} = ?$ [.756]

10. What is largest denominator you can enter for a fraction with the TI 30 XA? [999]

11. $17/8 + 23/4 = ?$ [45/8]

12. $5/8 \div 7/12 = ?$ [1.07 = 15/14 = 11/14]

Play with fractions.