Common Denominators – 2 Methods Emphasized

Multiplication Method: Multiply the denominators if the denominators are relatively prime (no common factors).

Reducing Method: Rewrite the denominators as a fraction, reduce, and then cross multiply if the denominators are larger and composite.

Example:

Find the common denominator for $\dfrac{7}{20}$ and $\dfrac{3}{44}$.

Using the Reducing Method, $\dfrac{20}{44} = \dfrac{5}{11}$. $44 \times 5 = 220$. Therefore,

the common denominator is 220.

Find the common denominators using the Multiplication or Reducing Method.

1. $\dfrac{3}{4}, \dfrac{5}{6}$ 2. $\dfrac{7}{30}, \dfrac{1}{45}$ 3. $\dfrac{3}{22}, \dfrac{2}{55}$

4. $\dfrac{1}{8}, \dfrac{2}{3}$ 5. $\dfrac{10}{11}, \dfrac{4}{5}$ 6. $\dfrac{8}{27}, \dfrac{4}{63}$

7. $\dfrac{1}{20}, \dfrac{11}{70}$ 8. $\dfrac{9}{12}, \dfrac{7}{40}$ 9. $\dfrac{2}{5}, \dfrac{8}{9}$

10. $\dfrac{3}{4}, \dfrac{13}{15}$ 11. $\dfrac{2}{3}, \dfrac{6}{7}$ 12. $\dfrac{4}{21}, \dfrac{5}{56}$

13. $\dfrac{3}{32}$, $\dfrac{7}{72}$ **14.** $\dfrac{3}{5}$, $\dfrac{1}{2}$, $\dfrac{2}{3}$ **15.** $\dfrac{1}{4}$, $\dfrac{4}{5}$, $\dfrac{3}{4}$

16.   5/18; 7/24   17.   7/18, 11/27   18.   11/16, 9/24

19.   7/32, 9/48   20.   11/24, 7/40   21.   7/18, 11/45