Multiply Fractions

Multiply Fractions – There are two ways to multiply fractions.

Method 1 – Reduce first, then multiply. *(easier)*

$$\frac{2}{5} \times \frac{3}{4} =$$ *Each fraction is already lowest terms, but 2 and 4 can be simplified diagonally.*

$$\frac{\overset{1}{\cancel{2}}}{5} \times \frac{3}{\underset{2}{\cancel{4}}} =$$ *Cross cancel using 2 as the GCF. 3 and 5 cannot be reduced further.*
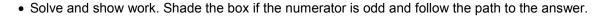
$$\frac{1}{5} \times \frac{3}{2} = \frac{3}{10}$$ *Multiply straight across. Double-check for lowest terms.*

Method 2 – Multiply first, then reduce.
(Okay, but sometimes the fractions get too large.)

$$\frac{2}{5} \times \frac{3}{4} = \frac{6}{20}$$ *Multiply straight across.*

$$= \frac{3}{10}$$ *Reduce to lowest terms.*

- Solve and show work. Shade the box if the numerator is odd and follow the path to the answer.

How long is the world record flight for a chicken?

START $\frac{1}{3} \times \frac{3}{8} =$	2. $\frac{1}{3} \times \frac{5}{8} =$	3. $\frac{8}{9} \times \frac{3}{4} =$	4. $\frac{2}{3} \times \frac{4}{1} =$
5. $\frac{9}{11} \times \frac{22}{27} =$	6. $\frac{3}{4} \times \frac{2}{9} =$	7. $\frac{5}{6} \times \frac{2}{3} =$	8. $\frac{6}{10} \times \frac{5}{12} =$
9. $\frac{2}{3} \times \frac{21}{1} =$	10. $\frac{4}{9} \times \frac{3}{5} =$	11. $\frac{8}{9} \times \frac{2}{5} =$	12. $\frac{3}{7} \times \frac{7}{9} =$
13. $\frac{1}{4} \times \frac{1}{4} =$	14. $\frac{5}{8} \times \frac{4}{10} =$	15. $\frac{3}{8} \times \frac{3}{4} =$	16. $\frac{3}{5} \times \frac{3}{8} =$
17. $\frac{8}{10} \times \frac{15}{25} =$	18. $\frac{2}{7} \times \frac{7}{10} =$	19. $\frac{3}{7} \times \frac{4}{5} =$	20. $\frac{5}{12} \times \frac{6}{7} =$
21. $\frac{4}{6} \times \frac{5}{9} =$	22. $\frac{3}{4} \times \frac{5}{6} \times \frac{8}{12} =$	23. $\frac{2}{7} \times \frac{3}{3} \times \frac{3}{7} =$	24. $\frac{5}{27} \times \frac{3}{10} \times \frac{4}{9} =$

↓ 7 minutes   ↓ 13 seconds   ↓ 2.5 minutes   ↓ 58 seconds

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Multiply Fractions – There are two ways to multiply fractions.

Method #1 – Reduce first, then multiply. *(easier)*

$\frac{2}{5} \times \frac{3}{4} =$ *Each fraction is already lowest terms, but 2 and 4 can be simplified diagonally.*

$\frac{\cancel{2}^{1}}{5} \times \frac{3}{\cancel{4}_{2}} =$ *Cross cancel using 2 as the GCF. 3 and 5 cannot be reduced further.*

$\frac{1}{5} \times \frac{3}{2} = \frac{3}{10}$ *Multiply straight across. Double-check for lowest terms.*

Method #2 – Multiply first, then reduce.
(Okay, but sometimes the fractions get too large.)

$\frac{2}{5} \times \frac{3}{4} = \frac{6}{20}$ *Multiply straight across.*

$= \frac{3}{10}$ *Reduce to lowest terms.*

- Solve and show work. Shade the box if the numerator is odd and follow the path to the answer.

How long is the world record flight for a chicken? **13 seconds**

START $\frac{1}{3} \times \frac{3}{8} = \frac{1}{8}$	2. $\frac{1}{3} \times \frac{5}{8} = \frac{5}{24}$	3. $\frac{8}{9} \times \frac{3}{4} = \frac{2}{3}$	4. $\frac{2}{3} \times \frac{4}{1} = 2\frac{2}{3}$
5. $\frac{9}{11} \times \frac{22}{27} = \frac{2}{3}$	6. $\frac{3}{4} \times \frac{2}{9} = \frac{1}{6}$	7. $\frac{5}{6} \times \frac{2}{3} = \frac{5}{9}$	8. $\frac{6}{10} \times \frac{5}{12} = \frac{1}{4}$
9. $\frac{2}{3} \times \frac{21}{1} = 14$	10. $\frac{4}{9} \times \frac{3}{5} = \frac{4}{15}$	11. $\frac{8}{9} \times \frac{2}{5} = \frac{16}{45}$	12. $\frac{3}{7} \times \frac{7}{9} = \frac{1}{3}$
13. $\frac{1}{4} \times \frac{1}{4} = \frac{1}{16}$	14. $\frac{5}{8} \times \frac{4}{10} = \frac{1}{4}$	15. $\frac{3}{8} \times \frac{3}{4} = \frac{9}{32}$	16. $\frac{3}{5} \times \frac{3}{8} = \frac{9}{40}$
17. $\frac{8}{10} \times \frac{15}{25} = \frac{12}{25}$	18. $\frac{2}{7} \times \frac{7}{10} = \frac{1}{5}$	19. $\frac{3}{7} \times \frac{4}{5} = \frac{12}{35}$	20. $\frac{5}{12} \times \frac{6}{7} = \frac{5}{14}$
21. $\frac{4}{6} \times \frac{5}{9} = \frac{10}{27}$	22. $\frac{3}{4} \times \frac{5}{6} \times \frac{8}{12} = \frac{5}{12}$	23. $\frac{2}{7} \times \frac{3}{3} \times \frac{3}{7} = \frac{6}{49}$	24. $\frac{5}{27} \times \frac{3}{10} \times \frac{4}{9} = \frac{2}{81}$

7 minutes   13 seconds   2.5 minutes   58 seconds