

Do each exercise below.

To Multiply Fractions, multiple the numerator (top number) by the other numerator (top number) and the denominator (bottom number) by the other denominator (bottom number)

- If one of the fractions is a mixed number (e.g., $1 \frac{1}{2}$), change it first to a fraction (e.g., $1 \frac{1}{2} = \frac{3}{2}$)

To Divide Fractions, multiple by the inverse of other fraction. For example $\frac{1}{2} \div \frac{2}{3}$ would be solved by multiplying by the inverse of $\frac{2}{3}$

- If one of the fractions is a mixed number (e.g., $1 \frac{1}{2}$), change it first to a fraction (e.g., $1 \frac{1}{2} = \frac{3}{2}$)

$$1. \quad \frac{2}{3} \times \frac{1}{5} = \frac{2 \times 1}{3 \times 5} = \frac{2}{15} \quad \text{YES} \quad \text{NO}$$

$$2. \quad \frac{3}{4} \times \frac{7}{12} = \frac{3 \times 7}{4 \times 12} = \frac{7}{16} \quad \text{YES} \quad \text{NO}$$

$$3. \quad \frac{3}{8} \text{ of } \frac{4}{9} = \frac{3 \times 4}{8 \times 9} = \frac{3}{3} \quad \text{YES} \quad \text{NO}$$

$$4. \quad \frac{7}{10} \div \frac{1}{2} = \frac{7 \times 2}{10 \times 1} = \frac{3}{5} \quad \text{YES} \quad \text{NO}$$

$$5. \quad \frac{5}{12} \div \frac{5}{8} = \frac{5 \times 8}{12 \times 5} = \frac{4}{5} \quad \text{YES} \quad \text{NO}$$

$$6. \quad \frac{9}{20} \div \frac{4}{15} = \frac{9 \times 15}{20 \times 4} = 1 \frac{11}{16} \quad \text{YES} \quad \text{NO}$$

$$7. \quad 1 \frac{1}{3} \times 2 \frac{1}{2} = \frac{4 \times 5}{3 \times 2} = 3 \frac{1}{3} \quad \text{YES} \quad \text{NO}$$

$$8. \quad 5 \frac{1}{4} \times 3 \frac{1}{7} = \frac{21 \times 22}{4 \times 7} = 16 \frac{1}{2} \quad \text{YES} \quad \text{NO}$$

16. Farmer Brown can harvest $2 \frac{1}{3}$ acres of corn in 1 day. How many acres of corn can he harvest in $10 \frac{1}{2}$ days?

_____ acres

1 day = $2 \frac{1}{3}$ acres

$10 \frac{1}{2}$ days = _____ acres

$$10 \frac{1}{2} \times 2 \frac{1}{3} = \frac{21 \times 7}{2 \times 3} = 24 \frac{1}{2} \quad \text{YES} \quad \text{NO}$$

$$9. \quad 1 \frac{7}{8} \times \frac{7}{10} = \frac{15 \times 7}{8 \times 10} = 5 \frac{1}{4} \quad \text{YES} \quad \text{NO}$$

$$10. \quad 4 \frac{1}{2} \div 1 \frac{4}{5} = \frac{9 \times 5}{2 \times 9} = 2 \frac{7}{8} \quad \text{YES} \quad \text{NO}$$

$$11. \quad 2 \frac{5}{8} \div 3 \frac{3}{4} = \frac{21 \times 4}{8 \times 15} = \frac{21}{30} \quad \text{YES} \quad \text{NO}$$

$$12. \quad 7 \frac{3}{10} \div 5 = \frac{73 \times 1}{10 \times 5} = 1 \frac{19}{50} \quad \text{YES} \quad \text{NO}$$

$$13. \quad 12 \div 3 \frac{1}{2} = \frac{12 \times 2}{5 \times 7} = 4 \frac{3}{7} \quad \text{YES} \quad \text{NO}$$

$$14. \quad 6 \frac{1}{4} \div \frac{5}{6} = \frac{25 \times 6}{4 \times 5} = 7 \frac{1}{3} \quad \text{YES} \quad \text{NO}$$

$$15. \quad \frac{2}{3} \times \frac{2}{3} \times \frac{2}{3} = \frac{2 \times 2 \times 2}{3 \times 3 \times 3} = \frac{8}{27} \quad \text{YES} \quad \text{NO}$$

17. Farmer Brown can harvest $2 \frac{1}{3}$ acres of corn in 1 day. How many days will it take him to harvest $10 \frac{1}{2}$ acres of corn? _____ days

$2 \frac{1}{3}$ acres = 1 day

$10 \frac{1}{2}$ acres = _____ days

$$10 \frac{1}{2} \div 2 \frac{1}{3} = \frac{21 \times 3}{2 \times 7} = 6 \frac{1}{2} \quad \text{YES} \quad \text{NO}$$