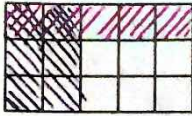


1. Multiply. Then, simplify to lowest terms if possible.

a) $7 \times \frac{3}{5} = \frac{21}{5}$ b) $8 \times \frac{5}{4} = \frac{40}{4} = 10$ c) $\frac{6}{10} \times 4 = \frac{24}{10} = \frac{12}{5}$ d) $\frac{1}{10} \times 6 = \frac{6}{10} = \frac{3}{5}$

2. Use the rectangle to find each product.

a) $\frac{1}{3} \times \frac{2}{5} = \frac{2}{15}$



b) $\frac{2}{3} \times \frac{3}{4} = \frac{6}{12} = \frac{1}{2}$



c) $\frac{5}{7} \times \frac{1}{2} = \frac{5}{14}$



3. Find each product by multiplying across. Then, simplify to lowest terms if possible.

a) $\frac{5}{8} \times \frac{1}{3} = \frac{5}{24}$ b) $\frac{3}{4} \times \frac{4}{5} = \frac{12}{20} = \frac{3}{5}$ c) $\frac{5}{7} \times \frac{1}{4} = \frac{5}{28}$
 d) $\frac{3}{5} \times \frac{4}{9} = \frac{12}{45} = \frac{4}{15}$ e) $\frac{3}{6} \times \frac{2}{4} = \frac{6}{24} = \frac{1}{4}$ f) $\frac{4}{9} \times \frac{4}{10} = \frac{16}{90} = \frac{8}{45}$
 g) $\frac{2}{3} \times \frac{1}{2} = \frac{2}{6} = \frac{1}{3}$ h) $\frac{4}{5} \times \frac{2}{5} = \frac{8}{25}$

4. Change mixed numbers to improper fractions then multiply.

a) $2\frac{3}{5} \times 1\frac{1}{2} = \frac{13}{5} \times \frac{3}{2} = \frac{39}{10} = 3\frac{9}{10}$ b) $4\frac{6}{8} \times 3\frac{2}{3} = \frac{38}{8} \times \frac{11}{3} = \frac{418}{24} = 17\frac{10}{24} = 17\frac{5}{12}$ c) $5\frac{1}{6} \times 2\frac{3}{4} = \frac{31}{6} \times \frac{11}{4} = \frac{341}{24} = 14\frac{5}{24}$ d) $\frac{5}{8} \times 3\frac{4}{5} = \frac{5}{8} \times \frac{19}{5} = \frac{95}{40} = 2\frac{3}{8}$

5. Divide. Use "keep multiply flip"

a) $\frac{10}{8} \div \frac{5}{8} = \frac{10}{8} \times \frac{8}{5} = \frac{80}{40} = 2$ c) $\frac{7}{9} \div \frac{2}{3} = \frac{7}{9} \times \frac{3}{2} = \frac{21}{18} = \frac{7}{6} = 1\frac{1}{6}$
 b) $\frac{12}{10} \div \frac{1}{5} = \frac{12}{10} \times \frac{5}{1} = \frac{60}{10} = 6$ d) $\frac{7}{12} \div \frac{1}{4} = \frac{7}{12} \times \frac{4}{1} = \frac{28}{12} = \frac{7}{3} = 2\frac{1}{3}$

7. Add or Subtract. First, find a common denominator. Then, simplify to lowest terms if possible.

a) $\frac{1}{4} + \frac{3}{5} = \frac{5}{20} + \frac{12}{20} = \frac{17}{20}$ b) $\frac{5}{8} + \frac{1}{3} = \frac{15}{24} + \frac{8}{24} = \frac{23}{24}$ c) $\frac{2}{5} + \frac{1}{8} = \frac{16}{40} + \frac{5}{40} = \frac{21}{40}$ d) $\frac{3}{10} + \frac{1}{3} = \frac{9}{30} + \frac{10}{30} = \frac{19}{30}$
 e) $\frac{4}{6} - \frac{3}{8} = \frac{16}{24} - \frac{9}{24} = \frac{7}{24}$ f) $\frac{5}{6} - \frac{5}{9} = \frac{15}{18} - \frac{10}{18} = \frac{5}{18}$ g) $\frac{3}{4} - \frac{1}{6} = \frac{9}{12} - \frac{2}{12} = \frac{7}{12}$ h) $\frac{3}{2} - \frac{5}{6} = \frac{9}{6} - \frac{5}{6} = \frac{4}{6} = \frac{2}{3}$

8. Follow the order of operations (BEDMAS)

a) $\frac{2}{5} \times (\frac{1}{4} + \frac{2}{3}) - \frac{3}{10}$

$\frac{2}{5} \times (\frac{3}{12} + \frac{8}{12}) - \frac{3}{10}$

$\frac{2}{5} \times \frac{11}{12} - \frac{3}{10}$

$\frac{22}{60} - \frac{18}{60}$

$\frac{4}{60} = \frac{1}{15}$

b) $\frac{7}{9} - (\frac{1}{3} + \frac{5}{6}) + 3$

$\frac{7}{9} - (\frac{2}{6} + \frac{5}{6}) + 3$

$\frac{7}{9} - \frac{7}{6} + 3$

$\frac{7}{9} - \frac{7}{6} \times \frac{1}{3}$

$\frac{14}{18} - \frac{7}{18} = \frac{7}{18}$

c) $4 + \frac{2}{3} - 3\frac{1}{4} + \frac{7}{12}$

$4 + \frac{2}{3} - \frac{13}{4} + \frac{7}{12}$

$\frac{4}{1} \times \frac{3}{3} - \frac{13}{4} + \frac{7}{12}$

$\frac{12}{2} - \frac{13}{4} + \frac{7}{12}$

$\frac{24}{4} - \frac{13}{4} + \frac{7}{12}$

$9 - \frac{13}{4} + \frac{7}{12}$

$\frac{27}{12} - \frac{13}{12} + \frac{7}{12}$
 $= \frac{20}{12}$
 $= \frac{5}{3}$

9. Ms. Lecky ordered pizza for a party. $\frac{5}{8}$ of the vegetarian pizza and $\frac{2}{3}$ of the ham and pineapple pizza were not eaten.

a) How much pizza was left?

What operation is needed to solve this problem, addition or subtraction? addition

b) If Ms. Lecky wanted to cut the remaining ham and vegetarian pizza into $\frac{1}{8}$ size slices, how many slices could she make?

What operation is needed to solve this problem, multiplication or division? division

Solve part 9b)

$1\frac{5}{8} + 2\frac{2}{3}$

$1\frac{15}{24} + \frac{16}{24}$

$1 + \frac{31}{24}$

$1 + 1 + \frac{7}{24}$

$2\frac{7}{24}$

$2\frac{7}{24} \div \frac{1}{8}$

$\frac{55}{24} \times \frac{8}{1}$

$= \frac{440}{24} = 18\frac{8}{24} = 18\frac{1}{3}$ slices

10. Ella baby-sits for $\frac{3}{4}$ h before school each morning.

a) How many hours does she baby-sit in a 5-day work week? Show the multiplication statement.

$5 \times \frac{3}{4} = \frac{15}{4} = 3\frac{3}{4}$ h

b) How many hours does she baby-sit in $4\frac{4}{5}$ weeks? Show the multiplication statement.

$4\frac{4}{5} \times 3\frac{3}{4}$
 $= \frac{24}{5} \times \frac{15}{4} = \frac{360}{20} = 18$ hours

11. On a trip to New Brunswick, Brad drove for $2\frac{1}{2}$ h stopped for lunch, then drove for $2\frac{2}{3}$ h. The total trip took $6\frac{1}{2}$ h. How long did Brad stop for lunch?

$6\frac{1}{2} - (2\frac{1}{2} + 2\frac{2}{3})$

$6\frac{1}{2} - (\frac{5}{2} + \frac{8}{3})$

$6\frac{1}{2} - (\frac{15}{6} + \frac{16}{6})$

$6\frac{3}{6} - (\frac{31}{6})$

$\frac{39}{6} - \frac{31}{6}$

$= \frac{8}{6}$

$= \frac{4}{3}$

$1\frac{1}{3}$ hours