

Mental Maths

Challenge

Challenge 1

Add fractions

$$\frac{5}{6} + \frac{4}{6} =$$

$$\frac{5}{22} + \frac{4}{22} =$$

$$\frac{7}{7} + \frac{4}{7} =$$

$$\frac{9}{4} + \frac{9}{4} =$$

$$\frac{5}{5} + \frac{7}{5} =$$

$$\frac{8}{16} + \frac{3}{16} =$$

$$\frac{15}{11} + \frac{4}{11} =$$

$$\frac{5}{14} + \frac{13}{14} =$$

$$\frac{11}{13} + \frac{11}{13} =$$

$$\frac{3}{10} + \frac{6}{10} =$$

$$\frac{5}{15} + \frac{11}{15} =$$

$$\frac{5}{6} + \frac{4}{6} =$$

$$\frac{5}{6} + \frac{14}{6} =$$

$$\frac{2}{21} + \frac{4}{21} =$$

Subtract fractions

$$\frac{5}{6} - \frac{4}{6} =$$

$$\frac{15}{20} - \frac{4}{20} =$$

$$\frac{7}{7} - \frac{4}{7} =$$

$$\frac{9}{4} - \frac{2}{4} =$$

$$\frac{9}{5} - \frac{7}{5} =$$

$$\frac{8}{16} - \frac{3}{16} =$$

$$\frac{15}{11} - \frac{4}{11} =$$

$$\frac{15}{14} - \frac{13}{14} =$$

$$\frac{12}{13} - \frac{11}{13} =$$

$$\frac{13}{10} - \frac{6}{10} =$$

$$\frac{15}{15} - \frac{11}{15} =$$

$$\frac{13}{6} - \frac{4}{6} =$$

$$\frac{20}{6} - \frac{14}{6} =$$

$$\frac{7}{19} - \frac{4}{19} =$$

Multiply fractions

$$\frac{3}{10} \times \frac{2}{3} =$$

$$\frac{2}{4} \times \frac{1}{2} =$$

$$\frac{3}{10} \times \frac{2}{4} =$$

$$\frac{2}{5} \times \frac{2}{10} =$$

$$\frac{2}{4} \times \frac{2}{3} =$$

$$\frac{1}{2} \times \frac{1}{4} =$$

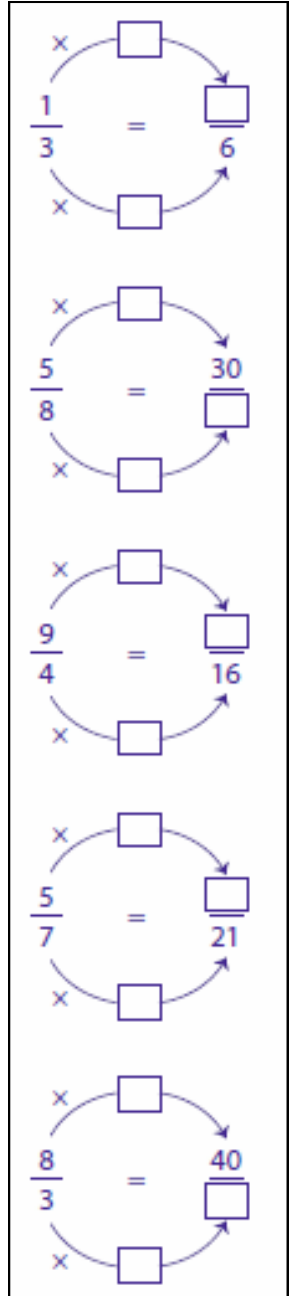
$$\frac{1}{2} \times \frac{3}{5} =$$

$$\frac{7}{10} \times \frac{2}{5} =$$

$$\frac{2}{3} \times \frac{1}{2} =$$

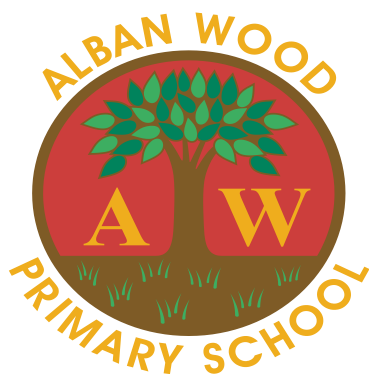
$$\frac{2}{3} \times \frac{1}{10} =$$

Equivalents



Simplify:

| | | | |
|----------------|----------------|----------------|------------------|
| $\frac{3}{12}$ | $\frac{5}{15}$ | $\frac{2}{10}$ | $\frac{6}{36}$ |
| $\frac{3}{21}$ | $\frac{2}{16}$ | $\frac{5}{45}$ | $\frac{10}{100}$ |



Mental Maths Challenge

Challenge 2

$$\frac{5}{6} + \frac{4}{5} =$$

$$\frac{5}{6} + \frac{4}{9} =$$

$$\frac{7}{7} + \frac{4}{6} =$$

$$\frac{9}{4} + \frac{9}{8} =$$

$$\frac{5}{5} + \frac{7}{3} =$$

$$\frac{8}{6} + \frac{3}{8} =$$

$$\frac{15}{11} + \frac{4}{4} =$$

$$\frac{5}{6} + \frac{13}{9} =$$

$$\frac{11}{12} + \frac{11}{4} =$$

$$\frac{3}{5} + \frac{6}{15} =$$

$$\frac{5}{15} + \frac{11}{3} =$$

$$\frac{2}{3} - \frac{2}{10} =$$

$$\frac{3}{5} - \frac{1}{3} =$$

$$\frac{3}{5} - \frac{1}{3} =$$

$$\frac{4}{5} - \frac{2}{4} =$$

$$\frac{2}{3} - \frac{1}{4} =$$

$$\frac{3}{5} - \frac{1}{4} =$$

$$\frac{2}{5} - \frac{1}{3} =$$

$$\frac{1}{3} - \frac{1}{4} =$$

$$\frac{4}{5} - \frac{2}{3} =$$

$$\frac{1}{2} - \frac{1}{3} =$$

$$\frac{3}{10} \times \frac{2}{3} =$$

$$\frac{2}{4} \times \frac{1}{2} =$$

$$\frac{3}{10} \times \frac{2}{4} =$$

$$\frac{2}{5} \times \frac{2}{10} =$$

$$\frac{2}{4} \times \frac{2}{3} =$$

$$\frac{1}{2} \times \frac{1}{4} =$$

$$\frac{1}{2} \times \frac{3}{5} =$$

$$\frac{7}{10} \times \frac{2}{5} =$$

$$\frac{2}{3} \times \frac{1}{2} =$$

$$\frac{2}{3} \times \frac{1}{10} =$$

$$\frac{2}{5} \div \frac{3}{4} =$$

$$\frac{2}{4} \div \frac{1}{2} =$$

$$\frac{4}{5} \div \frac{2}{3} =$$

$$\frac{2}{5} \div \frac{2}{3} =$$

$$\frac{2}{4} \div \frac{1}{5} =$$

$$\frac{3}{4} \div \frac{4}{5} =$$

$$\frac{1}{2} \div \frac{6}{10} =$$

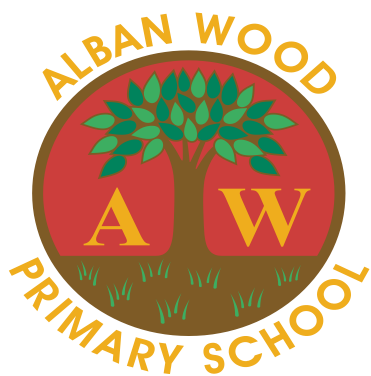
$$\frac{1}{2} \div \frac{2}{3} =$$

$$\frac{2}{4} \div \frac{3}{10} =$$

$$\frac{2}{3} \div \frac{1}{5} =$$

Simplify:

| | | | | | | |
|----------------|----------------|----------------|------------------|----------------|-----------------|-----------------|
| $\frac{3}{12}$ | $\frac{5}{15}$ | $\frac{2}{10}$ | $\frac{6}{36}$ | $\frac{6}{8}$ | $\frac{6}{9}$ | $\frac{4}{10}$ |
| $\frac{3}{21}$ | $\frac{2}{16}$ | $\frac{5}{45}$ | $\frac{10}{100}$ | $\frac{8}{10}$ | $\frac{10}{12}$ | $\frac{20}{70}$ |



Mental Maths

Challenge

Challenge 3

| | | | |
|---------------------------|-------------------------|----------------------------------|----------------------------------|
| $\frac{8}{10} \times 5 =$ | $\frac{1}{3} \div 7 =$ | $4\frac{1}{2} + 6\frac{1}{5} =$ | $5\frac{3}{5} - 2\frac{1}{10} =$ |
| $\frac{2}{3} \times 4 =$ | $6 \div \frac{1}{3} =$ | $2\frac{5}{10} + 5\frac{3}{5} =$ | $5\frac{2}{3} - 4\frac{2}{4} =$ |
| $\frac{3}{5} \times 5 =$ | $\frac{1}{10} \div 2 =$ | $3\frac{4}{5} + 8\frac{1}{3} =$ | $5\frac{3}{4} - 4\frac{2}{5} =$ |
| $\frac{9}{10} \times 6 =$ | $6 \div \frac{1}{3} =$ | $2\frac{4}{5} + 8\frac{3}{4} =$ | $9\frac{3}{5} - 1\frac{2}{4} =$ |
| $\frac{1}{2} \times 2 =$ | $5 \div \frac{3}{4} =$ | $3\frac{2}{3} + 5\frac{1}{4} =$ | $6\frac{3}{10} - 1\frac{1}{4} =$ |
| $\frac{1}{5} \times 2 =$ | $\frac{1}{2} \div 6 =$ | $6\frac{4}{10} + 5\frac{3}{4} =$ | $9\frac{1}{4} - 3\frac{1}{5} =$ |
| $\frac{4}{5} \times 3 =$ | $\frac{1}{3} \div 3 =$ | $2\frac{1}{4} + 7\frac{2}{10} =$ | $9\frac{1}{3} - 4\frac{1}{5} =$ |
| $\frac{1}{3} \times 8 =$ | $9 \div \frac{1}{2} =$ | $6\frac{1}{2} + 4\frac{4}{5} =$ | $6\frac{4}{5} - 1\frac{1}{4} =$ |
| $\frac{1}{2} \times 9 =$ | $4 \div \frac{4}{10} =$ | $2\frac{1}{2} + 9\frac{6}{10} =$ | $9\frac{7}{10} - 1\frac{2}{3} =$ |
| $\frac{1}{2} \times 8 =$ | $\frac{1}{4} \div 5 =$ | $5\frac{5}{10} + 8\frac{1}{2} =$ | $6\frac{2}{4} - 3\frac{4}{10} =$ |

Convert simple fractions to decimals using division:

$\frac{1}{6} =$ $\frac{1}{7} =$ $\frac{1}{8} =$ $\frac{1}{9} =$

$\frac{2}{7} =$ $\frac{3}{7} =$ $\frac{3}{8} =$ $\frac{5}{8} =$

$\frac{4}{7} =$ $\frac{4}{9} =$ $\frac{6}{7} =$ $\frac{8}{9} =$