

# FRACTIONS

## MULTIPLICATION AND DIVISION

| Example                                                                                                                                                                              |                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Find: <b>a</b> <math>\frac{2}{3} \times (-\frac{4}{5})</math></p>                                                                                                                 | <p><b>b</b> <math>\frac{1}{3} \times (\frac{2}{5})^2</math></p>                                                                                                                                                                            |
| <p><b>a</b> <math>\frac{2}{3} \times (-\frac{4}{5})</math><br/> <math>= -\frac{2 \times 4}{3 \times 5} \quad \{ (+) \times (-) = (-) \}</math><br/> <math>= -\frac{8}{15}</math></p> | <p><b>b</b> <math>\frac{1}{3} \times (\frac{2}{5})^2</math><br/> <math>= \frac{1}{3} \times \frac{2}{5} \times \frac{2}{5}</math><br/> <math>= \frac{1 \times 2 \times 2}{3 \times 5 \times 5}</math><br/> <math>= \frac{4}{75}</math></p> |

Evaluate, giving your answer in simplest form:

**a**  $\frac{3}{4} \times \frac{1}{3}$

**b**  $\frac{2}{5} \times \frac{3}{4}$

**c**  $(-\frac{1}{2}) \times \frac{2}{3}$

**d**  $\frac{4}{7}$  of 28

**e**  $\frac{5}{4} \times (-\frac{2}{3})$

**f**  $\frac{4}{7} \times \frac{21}{16}$

**g**  $1\frac{1}{2} \times (-\frac{1}{3})$

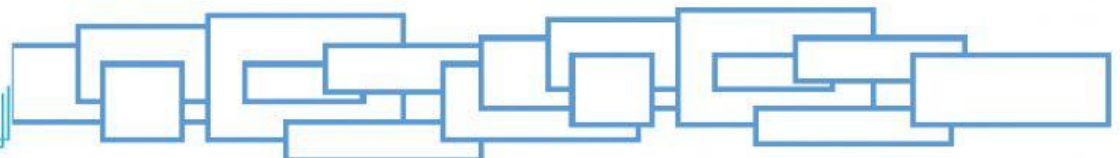
**h**  $(-\frac{3}{4})^2$

**i**  $\frac{3}{4}$  of 124

**j**  $\frac{3}{8} \times \frac{4}{9}$

**k**  $(-\frac{2}{3}) \times (-\frac{9}{8})$

**l**  $\frac{2}{5}$  of -65



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## MULTIPLICATION AND DIVISION

### Example

Find:

**a**  $\frac{5}{4} \div \frac{2}{3}$

**b**  $1\frac{1}{3} \div 3\frac{1}{2}$

**a**  $\frac{5}{4} \div \frac{2}{3}$   
 $= \frac{5}{4} \times \frac{3}{2}$  {multiplying by  
 $= \frac{15}{8}$  reciprocal}

**b**  $1\frac{1}{3} \div 3\frac{1}{2}$   
 $= \frac{4}{3} \div \frac{7}{2}$  {converting to  
 $= \frac{4}{3} \times \frac{2}{7}$  improper fractions}  
 $= \frac{8}{21}$

Find:

**a**  $\frac{2}{3} \div \frac{1}{6}$

**b**  $\frac{5}{7} \div \frac{1}{3}$

**c**  $\frac{3}{4} \div (-\frac{1}{2})$

**d**  $\frac{4}{5} \div 3$

**e**  $\frac{1}{4} \div 1\frac{2}{3}$

**f**  $2\frac{3}{4} \div \frac{2}{3}$

**g**  $1\frac{1}{2} \div (-\frac{3}{4})$

**h**  $3\frac{1}{5} \div 1\frac{1}{3}$