

Year 9 Set 5 Work

Calculating with Fractions

Convert the following into improper fractions

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

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

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

b $3\frac{3}{7} =$

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

g $9\frac{3}{5} =$

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

h $11\frac{3}{4} =$

Multiply these fractions

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

c $7\frac{7}{10} \times 2\frac{5}{12} =$

e $4\frac{1}{2} \times 1\frac{1}{3} =$

b $3\frac{5}{8} \times 3\frac{2}{3} =$

d $3\frac{1}{6} \times 8\frac{2}{3} =$

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

Divide these fractions

a $7\frac{1}{2} \div 3\frac{2}{3} =$

c $12\frac{1}{2} \div 4\frac{5}{6} =$

e $11\frac{4}{5} \div 2\frac{2}{9} =$

b $9\frac{1}{2} \div 3\frac{2}{3} =$

d $6\frac{1}{2} \div 3\frac{2}{3} =$

f $2\frac{1}{8} \div 1\frac{2}{3} =$

Add or Subtract these fractions

a $7\frac{1}{2} + 3\frac{2}{3} =$

c $12\frac{1}{2} + 4\frac{5}{6} =$

e $11\frac{4}{5} - 2\frac{2}{9} =$

b $9\frac{1}{2} + 3\frac{2}{3} =$

d $6\frac{1}{2} - 3\frac{2}{3} =$

f $2\frac{1}{8} - 1\frac{2}{3} =$

Problems

- 1 There are 24 students in a class. One third of the class are boys who wear glasses. One quarter of the class are girls. How many boys do not wear glasses?

- 2 36 students went to one revision class. $\frac{1}{6}$ of the students went to the physics revision class.
 $\frac{2}{9}$ of the students went to the biology revision class. All of the other students went to the chemistry revision class. How many students went to the chemistry revision class?

- 3 Last season a football team won $\frac{2}{5}$ of their matches and drew $\frac{7}{20}$ of their matches. They lost 10 matches. They were awarded 3 points for a win, 1 point for a draw and no points for a loss.
How many points did this team have at the end of the season?

- 4 The area of farmer Jackie's field is 12m^2 .
 - a If the length of the field is $2\frac{3}{4}\text{m}$, calculate the width of the field.
 - b Calculate the perimeter of the field. Give your answer as a mixed number.

- 5 The diagram below is drawn to scale.
What fraction of the diagram is shaded in?

