

## 2 Year IGCSE Course Week 2 homework

1 Find the following fractions

- a)  $\frac{3}{4}$  of 32      b)  $\frac{4}{5}$  of 75      c)  $\frac{2}{9}$  of 630      d)  $\frac{7}{15}$  of 60      e)  $\frac{2}{13}$  of 3.9

2 Find the pairs of equivalent fractions

- $\frac{3}{4}$     $\frac{6}{15}$     $\frac{10}{45}$     $\frac{5}{6}$     $\frac{3}{7}$     $\frac{15}{20}$     $\frac{12}{28}$     $\frac{30}{36}$     $\frac{2}{5}$     $\frac{2}{9}$

3 Write the larger fraction in each pair

- a)  $\frac{2}{3}$     $\frac{4}{7}$       b)  $\frac{2}{5}$     $\frac{1}{3}$       c)  $\frac{3}{5}$     $\frac{5}{8}$       d)  $\frac{3}{4}$     $\frac{7}{10}$

4 Change to mixed numbers

- a)  $\frac{8}{5}$       b)  $\frac{7}{3}$       c)  $\frac{13}{6}$       d)  $\frac{15}{4}$       e)  $\frac{31}{7}$

5 Change to improper fractions

- a)  $1 \frac{1}{3}$       b)  $2 \frac{1}{2}$       c)  $2 \frac{3}{5}$       d)  $3 \frac{5}{8}$       e)  $5 \frac{2}{11}$

6 Work out, give your answers as fractions in their lowest terms

- a)  $\frac{3}{4} + \frac{4}{5}$       b)  $\frac{7}{9} - \frac{3}{4}$       c)  $1 \frac{2}{3} + 2 \frac{3}{8}$       d)  $2 \frac{5}{7} - 1 \frac{1}{4}$       **NC**

7 Alice goes to the cinema and watches 2 films. The first film is  $1 \frac{5}{6}$  hours long, there is then a break for a third of an hour. The second film is  $2 \frac{1}{4}$  hours long. How long is Alice at the Cinema for?

8 Work out, give your answers as fractions in their lowest terms

- a)  $\frac{2}{3} \times \frac{5}{8}$       b)  $1 \frac{1}{4} \times \frac{2}{5}$       c)  $1 \frac{2}{3} \times 1 \frac{3}{5}$       d)  $2 \frac{3}{7} \times 4 \frac{1}{5}$   
e)  $\frac{2}{3} \div \frac{1}{4}$       f)  $1 \frac{3}{4} \div \frac{2}{3}$       g)  $1 \frac{3}{8} \div 2 \frac{3}{4}$       h)  $2 \frac{1}{4} \div 3 \frac{1}{2}$

9 Remember when dealing with whole numbers and fractions in a question convert the whole number into a fraction

- s)  $8 \times \frac{1}{4}$       b)  $9 \times 2 \frac{1}{3}$       c)  $8 \div \frac{1}{4}$       d)  $10 \div \frac{2}{3}$       e)  $\frac{5}{6} \div 2$

10 Gina divides her pizza into 3 equal pieces for herself and her 2 friends. Her friend Harry eats  $\frac{3}{5}$  of his piece immediately and saves the rest for dinner. What fraction of the original has Harry got left for dinner?

11 Geela drinks  $2 \frac{1}{4}$  litres of water each day. A bottle of water contains  $1 \frac{1}{2}$  litres. How many bottles does Geela drink in a week?

12 John has a bag of sweets, he eats  $\frac{5}{7}$  of them, what fraction does he have left? If he now has 8 sweets, how many sweets did he have to start with?

13 The reciprocal of the number  $n$  is  $\frac{1}{n}$ , you can also write this as  $n^{-1}$

- eg the reciprocal of 2 is  $\frac{1}{2}$       the reciprocal of  $\frac{2}{5}$  is  $\frac{5}{2} = 2 \frac{1}{2}$   
Find the reciprocal of    a) 8      b)  $\frac{2}{3}$       c)  $3 \frac{1}{4}$       d) 1.25      e) 0.375

14 Show that  $1 \frac{3}{7} + 2 \frac{7}{11} = 4 \frac{5}{77}$

15 Show that  $1 \frac{3}{4} \div 2 \frac{4}{5} = \frac{5}{8}$

16 **Calculator Work**      work out the following with your calculator  
**give your answer as a mixed number**

- a)  $3 \frac{5}{11} + 1 \frac{5}{8}$       b)  $5 \frac{1}{6} - 3 \frac{9}{10}$       c)  $7 \frac{4}{5} \times 3 \frac{1}{3}$       d)  $3 \frac{1}{5} \div 2 \frac{2}{3}$

17 In a carpark there  $\frac{1}{3}$  of the cars are blue,  $\frac{2}{5}$  are silver, the rest of the cars are black, if there are 20 black cars how many cars are there in total?

18 A little bit of revision

- a)  $0.6 \times 10$       b)  $70 \times 10$       c)  $23.6 \times 10$       d)  $8.234 \times 100$       e)  $0.067 \times 100$       f)  $5.8 \times 0.1$   
g)  $70 \div 10$       h)  $0.6 \div 10$       i)  $97 \div 10$       j)  $18.25 \div 100$       k)  $4750 \div 1000$       l)  $0.47 \div 0.1$