

FRACTIONS, DECIMALS & PERCENTAGES

MNU 3 07-a

I can solve problems by carrying out calculations with a wide range of fractions, decimal fractions and percentages, using my answers to make comparisons and informed choices for real-life situations.

MTH 3 07-b

By applying my knowledge of equivalent fractions and common multiples, I can add and subtract commonly used fractions.

MNU 3 07-c

Having used practical, pictorial and written methods to develop my understanding, I can convert between whole or mixed numbers and fractions

Pupils should be able to:

- Understand a fraction both as a number and as a division process
- Understand the idea of equivalent fractions
- Express simple fractions as decimals
- Be familiar with the decimal values of fractions out of 4, 5, 10, 20, 50, 100
- Mentally find simple fractions of quantities e.g. $\frac{3}{5}$ of £30
- Understand the meaning of percentage
- Mentally convert simple percentages to fractions
- Convert between whole or mixed numbers and fractions
- Mentally find simple percentages of quantities e.g. 20% of 80m
- Add/subtract commonly used fractions

PUPILS SHOULD COMPLETE THE FOLLOWING EXERCISE AND ASSESS THEIR PROGRESS BY TICKING ONE OF THE OPTIONS FOR EACH TOPIC IN THE TABLE BELOW

	DEVELOPING	CONSOLIDATING	SECURE
Fractions to decimals Equivalent fractions. Mixed Fractions (QUESTIONS 1 - 3)			
Calculate $\frac{3}{5}$ of £30 30% of £30 (QUESTIONS 6-8)			
Add/subtract commonly used fractions. (QUESTIONS 9 - 10)			

Mymaths lessons: library/number/fractions/fractions to decimals

Library/number/percentages/frac dec perc 1 & 2

Library/number/decimals/recurring decimals 1 & 2

1. Write these fractions as decimals:-

a) $\frac{1}{2}$ b) $\frac{1}{4}$ c) $\frac{3}{4}$ d) $\frac{7}{10}$ e) $\frac{1}{5}$ f) $\frac{6}{100}$ g) $\frac{4}{5}$

2. Which pairs of fractions are equivalent:-

a) $\frac{4}{5}$, $\frac{2}{3}$ b) $\frac{9}{12}$, $\frac{3}{4}$ c) $\frac{2}{5}$, $\frac{3}{6}$ d) $\frac{2}{7}$, $\frac{4}{14}$ e) $\frac{3}{4}$, $\frac{15}{20}$

3. Shannon has $\frac{1}{2}$ of a pizza and Clare has $\frac{3}{6}$ of the pizza. Do they eat the same?

4. Change the following top-heavy fractions to mixed numbers:-

a) $\frac{13}{4}$ b) $\frac{29}{5}$ c) $\frac{73}{10}$ d) $\frac{66}{8}$ e) $\frac{21}{4}$

5. Change the following mixed numbers to top-heavy fractions:-

a) $3\frac{2}{3}$ b) $4\frac{5}{9}$ c) $1\frac{7}{8}$ d) $5\frac{6}{13}$ e) $2\frac{3}{4}$

6. Mentally find:-

a) $\frac{2}{5}$ of 40 b) $\frac{3}{4}$ of 16 c) $\frac{2}{3}$ of 33 d) $\frac{4}{7}$ of 28

7. Mentally convert these percentages to fractions:-

a) 10% b) 20% c) 50% d) 25% e) 1% f) 75% 100%

8. Mentally find:-

a) 10 % of 50 b) 20% of 40 c) 60% of 120 d) 5% of 90 e) 75% of 140

9. Add the following fractions:-

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

10. Subtract the following fractions:-

a) $\frac{8}{12} - \frac{4}{12}$ b) $\frac{7}{8} - \frac{3}{4}$ c) $\frac{2}{3} - \frac{1}{2}$ d) $\frac{3}{4} - \frac{2}{3}$