

11+ Maths Practice Paper

Year 6 · Advanced

Lesson 3.9: FDP conversions

Read this with your child:

1. This paper has **27 questions** in two parts. Work through them in order. The questions get harder as you go.
2. **Part 1** is multiple choice. Choose **one** answer, A, B, C, D or E, and mark it on the separate answer sheet by drawing a firm line through the box next to its letter. If you change your mind, rub the line out completely and mark your new answer.
3. **Part 2** asks you to write your answer. Write it in the boxes on the answer sheet, **one digit in each box**, starting from the left.
4. If a question is hard, leave it and come back to it at the end.
5. You may use rough paper for working out. You may **not** use a calculator.
6. Suggested time: **35 minutes**.

The answer sheet is after the questions. The answers, with a short explanation of each, are at the back for a parent to mark with.

These are original practice questions written by Elite Learners in the style of 11+ entrance tests. They are not produced by, or connected with, GL Assessment or Cambridge University Press & Assessment (CEM).

Example

Write $\frac{3}{8}$ as a percentage.

A 38%

B 37.5%

C 3.8%

D 30%

E 62.5%

Answer: B $\frac{1}{8} = 12.5\%$, so $\frac{3}{8} = 3 \times 12.5\% = 37.5\%$.

The answer, B, has already been marked on your answer sheet.

Now turn over and start Part 1.

Part 1: Multiple choice

1

Write $\frac{7}{8}$ as a decimal.

- A 0.78 B 0.875 C 0.87 D 0.785 E 7.8

2

Write 1.25 as a percentage.

- A 12.5% B 1.25% C 25% D 125% E 1250%

3

Write 0.625 as a fraction in its simplest form.

- A $\frac{5}{8}$ B $\frac{3}{8}$ C $\frac{6}{25}$ D $\frac{2}{3}$ E $\frac{5}{16}$

4

Write $1\frac{3}{4}$ as a decimal.

- A 1.34 B 0.175 C 1.43 D 17.5 E 1.75

5

12 of the 40 children in a club are boys.

What percentage of the club are boys?

- A 12% B 40% C 30% D 28% E 3%

6

A price goes up from £20 to £25.

What is the percentage increase?

- A 25% B 5% C 20% D 125% E 80%

7

Write 2.5% as a decimal.

- A 0.25 B 2.5 C 0.0025 D 0.205 E 0.025

8

Which of these is the largest?

- A $\frac{5}{8}$ B 63% C 0.6 D 0.615 E $\frac{31}{50}$
-

9

Write 150% as a mixed number.

- A $1\frac{1}{5}$ B $\frac{1}{2}$ C 15 D $1\frac{1}{2}$ E $1\frac{1}{50}$
-

10

Which of these is NOT equal to the others?

- A $\frac{1}{8}$ B 0.125 C 0.18 D 12.5% E $\frac{125}{1000}$
-

11

54 of the 60 seats on a bus are taken.

What percentage of the seats are taken?

- A 54% B 6% C 10% D 85% E 90%
-

12

Write 0.36 as a fraction in its simplest form.

- A $\frac{3}{6}$ B $\frac{9}{25}$ C $\frac{9}{20}$ D $\frac{1}{36}$ E $\frac{4}{9}$
-

13

Which list is in order, smallest first?

- A 0.35, 36%, $\frac{3}{8}$, $\frac{2}{5}$
B $\frac{2}{5}$, $\frac{3}{8}$, 36%, 0.35
C 0.35, $\frac{3}{8}$, 36%, $\frac{2}{5}$
D 36%, 0.35, $\frac{2}{5}$, $\frac{3}{8}$
E $\frac{3}{8}$, 0.35, 36%, $\frac{2}{5}$
-

14

A shop has 300 apples. 75 of them are green.

What percentage of the apples are green?

- A** 75% **B** 7.5% **C** 22.5% **D** 25% **E** 35%
-

15

A runner's time for a race goes down from 80 seconds to 68 seconds.

What is the percentage decrease?

- A** 12% **B** 85% **C** 15% **D** 68% **E** 20%
-

16

Which of these is closest to $\frac{1}{2}$?

- A** $\frac{3}{8}$ **B** 45% **C** 0.58 **D** 0.47 **E** $\frac{5}{8}$
-

17

Write $1\frac{3}{8}$ as a decimal.

- A** 1.375 **B** 1.38 **C** 1.3 **D** 13.75 **E** 1.83
-

18

45% of the pupils in a school are boys. The rest are girls.

What fraction of the pupils are girls, in its simplest form?

- A** $\frac{9}{20}$ **B** $\frac{11}{20}$ **C** $\frac{5}{11}$ **D** $\frac{11}{50}$ **E** $\frac{1}{2}$
-

19

One row of a conversion grid has the fraction missing. The decimal is 0.32 and the percentage is 32%.

What fraction goes in the gap, in its simplest form?

- A** $\frac{3}{2}$ **B** $\frac{16}{25}$ **C** $\frac{4}{25}$ **D** $\frac{1}{32}$ **E** $\frac{8}{25}$
-

20

In a test, Ella scores $\frac{17}{20}$, Finn scores 0.8 and Gita scores 84%.

Who has the highest score?

- A Finn
- B Gita
- C Ella
- D Ella and Gita, who are equal
- E They are all equal

Part 2: Write your answer

21

What is the missing number?

$$\frac{875}{1000} = \frac{\boxed{?}}{8}$$

Write your answer in the boxes on the answer sheet, one digit in each box.

22

Write $1\frac{2}{5}$ as a percentage.

Write your answer in the boxes on the answer sheet, one digit in each box.

23

18 of the 40 people on a train are standing.

What percentage of the people are standing?

Write your answer in the boxes on the answer sheet, one digit in each box.

24

A price rises from £50 to £60.

What is the percentage increase?

Write your answer in the boxes on the answer sheet, one digit in each box.

25

Write 2.3 as a percentage.

Write your answer in the boxes on the answer sheet, one digit in each box.

26

A school has 200 pupils. 130 of them have school dinners.

What percentage have school dinners?

Write your answer in the boxes on the answer sheet, one digit in each box.

27

A plant grows from 40 cm to 50 cm.

What is the percentage increase in its height?

Write your answer in the boxes on the answer sheet, one digit in each box.

Answer sheet

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Name

Draw a firm line through the box next to your answer, like the example.

Part 1: Multiple choice

Ex	A ☐	B ☒	C ☐	D ☐	E ☐
1	A ☐	B ☐	C ☐	D ☐	E ☐
2	A ☐	B ☐	C ☐	D ☐	E ☐
3	A ☐	B ☐	C ☐	D ☐	E ☐
4	A ☐	B ☐	C ☐	D ☐	E ☐
5	A ☐	B ☐	C ☐	D ☐	E ☐
6	A ☐	B ☐	C ☐	D ☐	E ☐
7	A ☐	B ☐	C ☐	D ☐	E ☐
8	A ☐	B ☐	C ☐	D ☐	E ☐
9	A ☐	B ☐	C ☐	D ☐	E ☐
10	A ☐	B ☐	C ☐	D ☐	E ☐
11	A ☐	B ☐	C ☐	D ☐	E ☐
12	A ☐	B ☐	C ☐	D ☐	E ☐
13	A ☐	B ☐	C ☐	D ☐	E ☐
14	A ☐	B ☐	C ☐	D ☐	E ☐
15	A ☐	B ☐	C ☐	D ☐	E ☐
16	A ☐	B ☐	C ☐	D ☐	E ☐
17	A ☐	B ☐	C ☐	D ☐	E ☐
18	A ☐	B ☐	C ☐	D ☐	E ☐
19	A ☐	B ☐	C ☐	D ☐	E ☐
20	A ☐	B ☐	C ☐	D ☐	E ☐

Part 2: Write your answer, one digit in each box

21		25	
22		26	
23		27	
24			

Answers

For a parent to mark with. One mark for each question: the paper is out of 27. Talk through any your child got wrong, using the explanation.

Q	Answer	How to get it
1	B 0.875	$\frac{1}{8} = 0.125$, so $\frac{7}{8} = 7 \times 0.125 = 0.875$.
2	D 125%	$1.25 \times 100 = 125$, so $1.25 = 125\%$.
3	A $\frac{5}{8}$	$0.625 = \frac{625}{1000}$. Divide the top and bottom by 125: $\frac{5}{8}$.
4	E 1.75	$\frac{3}{4} = 0.75$, so $1 \frac{3}{4} = 1.75$.
5	C 30%	$\frac{12}{40} = \frac{3}{10}$ (divide both by 4), and $\frac{3}{10} = 30\%$.
6	A 25%	It goes up by £5, out of the old price £20: $\frac{5}{20} = \frac{1}{4} = 25\%$.
7	E 0.025	$2.5 \div 100 = 0.025$.
8	B 63%	63% is the largest. The others are 62.5%, 60%, 61.5% and 62%.
9	D $1 \frac{1}{2}$	$150\% = 100\% + 50\% = 1 + \frac{1}{2} = 1 \frac{1}{2}$.
10	C 0.18	$\frac{1}{8} = 0.125 = 12.5\% = \frac{125}{1000}$. But 0.18 is 18%.
11	E 90%	$\frac{54}{60} = \frac{9}{10}$ (divide both by 6), and $\frac{9}{10} = 90\%$.
12	B $\frac{9}{25}$	$0.36 = \frac{36}{100}$. Divide the top and bottom by 4: $\frac{9}{25}$.
13	A 0.35, 36%, $\frac{3}{8}$, $\frac{2}{5}$	As percentages they are 35%, 36%, 37.5% and 40%.
14	D 25%	$\frac{75}{300} = \frac{25}{100}$ (divide both by 3), which is 25%.
15	C 15%	It goes down by 12 seconds, out of 80: $\frac{12}{80} = \frac{3}{20} = 15\%$.
16	D 0.47	$\frac{1}{2} = 50\%$. $0.47 = 47\%$ is 3% away; the others are 37.5%, 45%, 58% and 62.5%.
17	A 1.375	$\frac{3}{8} = 0.375$, so $1 \frac{3}{8} = 1.375$.
18	B $\frac{11}{20}$	The girls are $100\% - 45\% = 55\% = \frac{55}{100}$. Divide the top and bottom by 5: $\frac{11}{20}$.
19	E $\frac{8}{25}$	$0.32 = \frac{32}{100}$. Divide the top and bottom by 4: $\frac{8}{25}$.
20	C Ella	As percentages: Ella 85%, Finn 80%, Gita 84%. Ella is highest.
21	7	$0.875 = \frac{875}{1000}$. Divide the top and bottom by 125: $\frac{7}{8}$.
22	140	$1 = 100\%$ and $\frac{2}{5} = 40\%$, so $1 \frac{2}{5} = 140\%$.
23	45	$\frac{18}{40} = \frac{9}{20}$ (divide both by 2), and $\frac{9}{20} = \frac{45}{100} = 45\%$.
24	20	It rises by £10, out of £50: $\frac{10}{50} = \frac{1}{5} = 20\%$.
25	230	$2.3 \times 100 = 230$, so the answer is 230%.
26	65	$200 \div 2 = 100$ and $130 \div 2 = 65$: $\frac{65}{100} = 65\%$.
27	25	It grows 10 cm, out of 40 cm: $\frac{10}{40} = \frac{1}{4} = 25\%$.

Score: out of 27