Name:

Exam Style Questions

Decimals to Fractions
Fractions to Decimals

Corbettmaths

Equipment needed: Pen, Calculator

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Videos 123, 124, 127, 128

Answers and Video Solutions

1. Write 0.25 as a fraction.

$\frac{1}{4}$

.....

(1)

2. Write 0.7 as a fraction.

$\frac{7}{10}$

.....

(1)

3. What is $\frac{1}{5}$ as a decimal?

Circle your answer.

0.2 0.5 0.02 0.05

(1)

4. Write 0.6 as a fraction.
Give your answer in its simplest form.

$\frac{6}{10} = \frac{3}{5}$

$\frac{3}{5}$

.....

(2)

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

0.75

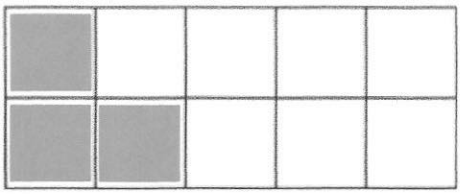
(1)

6. Write $\frac{4}{5}$ as a decimal.

0.8

(1)

7.



(a) Write down the fraction of the grid that is shaded.

$\frac{3}{10}$

(1)

(b) Write your answer to (a) as a decimal.

0.3

(1)

8. Write 0.14 as a fraction.
Give your answer in its simplest form.

$\frac{14}{100} = \frac{7}{50}$

$\frac{7}{50}$

.....

(2)

9. Write 0.52 as a fraction.
Give your answer in its simplest form.

$\frac{52}{100} = \frac{26}{50} = \frac{13}{25}$

$\frac{13}{25}$

.....

(2)

10. Write 0.08 as a fraction.
Give your answer in its simplest form.

$\frac{8}{100} = \frac{4}{50} = \frac{2}{25}$

$\frac{2}{25}$

.....

(2)

11. Write $\frac{9}{10}$ as a decimal.

0.9

.....

(1)

12. Write 0.012 as a fraction.
Give your answer in its simplest form.

$\frac{12}{1000} = \frac{6}{500} = \frac{3}{250}$

$\frac{3}{250}$

.....

(2)

13. Write $\frac{3}{100}$ as a decimal.

0.03

.....

(1)

14. Write $\frac{3}{20}$ as a decimal.

$$20\overline{)3.00}$$

0.15

.....

(1)

15. Write 0.47 as a fraction.

$\frac{47}{100}$

.....

(1)

0·25 0·333...

16. Circle the decimal that is greater than $\frac{1}{4}$ and less than $\frac{1}{3}$

0.21 0.24 0.31 0.34

(1)

17. Write 0.82 as a fraction.
Give your answer in its simplest form.

$\frac{82}{100} = \frac{41}{50}$

$\frac{41}{50}$

.....

(2)

18. Circle the value of 0.35 as a fraction.

$\frac{3}{5}$ $\frac{2}{7}$ $\frac{1}{3}$ $\frac{7}{20}$

(1)

19. What is $\frac{9}{2}$ as a decimal?

Circle your answer.

9.2 2.9 4.1 4.5

(1)

20. Circle the correct statement.

0.75

$0.7 > \frac{3}{4}$ $0.7 = \frac{3}{4}$ $0.7 < \frac{3}{4}$

× ×

(1)

21. Write 0.902 as a fraction.
Give your answer in its simplest form.

$\frac{902}{1000} = \frac{451}{500}$

$\frac{451}{500}$

(2)

22. Write $\frac{9}{40}$ as a decimal.

$40\overline{)9.^{9}0^{10}0^{20}0}$ = 0.225

0.225

(2)

23. Write $\frac{5}{8}$ as a decimal.

$8\overline{)5.^{5}0^{2}0^{4}0}$ = 0.625

0.625

(2)

24. Write 0.725 as a fraction in its simplest form.

$\frac{725}{1000} = \frac{145}{200} = \frac{29}{40}$

$\frac{29}{40}$

(2)

25. Use one of the symbols $<, =$ or $>$ to make the statement true.

0.333...

0.4 > $\frac{1}{3}$

(1)

26. Noel says that 0.66 is equal to $\frac{2}{3}$

Is Noel correct?
Explain your answer.

$\frac{2}{3} = 0.66666...$

No, 2/3 is equal to 0.6666..., not 0.66.

(1)

27. Write $\frac{7}{16}$ as a decimal.

$7 \div 16 = 0.4375$

0.4375

(1)

28. Write $\frac{13}{42}$ as a decimal.

Give your answer to 2 decimal places.

$13 \div 42 = 0.309523809\overline{5}$

0.31

.....

(2)

29. Write 0.4932 as a fraction in its simplest form.

$\frac{1233}{2500}$

.....

(1)

30. Write 1.925 as a fraction.
Give your answer in its simplest form.

$\frac{77}{40}$

.....

(2)

31. Circle the fraction that is equivalent to 5.25

$\frac{21}{4}$ $\frac{23}{4}$ $\frac{25}{4}$ $\frac{27}{4}$

$21 \div 4 = 5.25$

(1)

32. Circle the fraction that is equivalent to 2.375

$\frac{17}{8}$ $\frac{9}{4}$ $\frac{19}{8}$ $\frac{21}{8}$

$19 \div 8 = 2.375$

(1)

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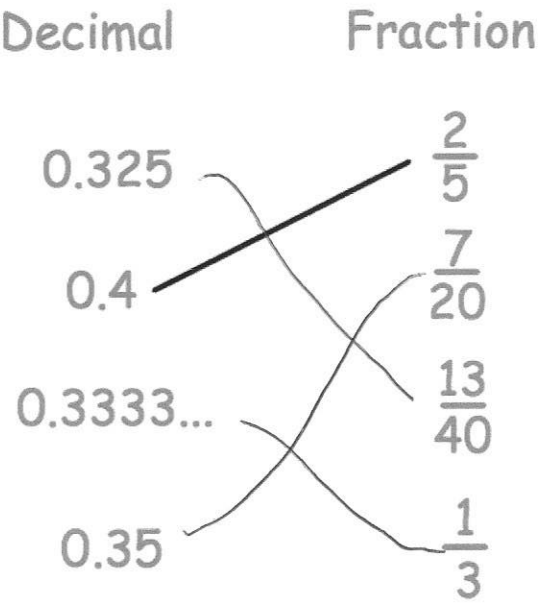
33. Match each decimal and fraction.



(2)

34. Arrange the following numbers in order, from smallest to largest

$0.7 \quad \frac{2}{3} \quad 0.65 \quad \frac{3}{5} \quad \frac{5}{8}$

$0.666\ldots \qquad 0.6 \qquad 0.625$

$\frac{3}{5}$, $\frac{5}{8}$, 0.65 , $\frac{2}{3}$, 0.7

(3)