

Decimals to Fractions - Worksheet

Skill

Group A - Decimals to fractions

Write these decimals as fractions. Give the fractions in their simplest term:

1) 0.1

2) 0.3

3) 0.8

4) 0.15

5) 0.35

6) 0.85

7) 0.24

8) 0.25

9) 0.29

10) 0.62

11) 0.66

12) 0.68

Group B - Fractions to decimals

Write these fractions as decimals. Some are recurring decimals:

1) $\frac{1}{2}$

2) $\frac{1}{3}$

3) $\frac{2}{3}$

4) $\frac{1}{5}$

5) $\frac{3}{5}$

6) $\frac{4}{5}$

7) $\frac{1}{20}$

8) $\frac{7}{20}$

9) $\frac{19}{20}$

10) $\frac{1}{25}$

11) $\frac{8}{25}$

12) $\frac{19}{25}$

Group C - Mixed exercise

Write the equivalent fraction / decimal. Give the fractions in their simplest term.

Some are recurring decimals:

1) 0.35

2) 0.36

3) 0.54

4) 0.56

5) 0.71

6) 0.75

7) $\frac{1}{8}$

8) $\frac{3}{8}$

9) $\frac{1}{9}$

10) $\frac{5}{9}$

11) $\frac{1}{12}$

12) $\frac{11}{12}$

Decimals to Fractions - Worksheet

Applied

- 1) (a) Write $\frac{2}{7}$ as a decimal. Give your answer to 4 decimal places.
- (b) Write $\frac{9}{14}$ as a decimal. Give your answer to 4 decimal places.
- 2) (a) Write 1.7 as a fraction. Give your answer as a mixed number.
- (b) Write 3.14 as a fraction. Give your answer as a mixed number.
- 3) (a) Write $1\frac{4}{25}$ as a decimal.
- (b) Write $\frac{9}{4}$ as a decimal.
- 4) (a) Convert $0.\dot{3}$ to a fraction. Circle the correct answer:
- $\frac{1}{3}$ $\frac{1}{33}$ $\frac{3}{10}$ $\frac{33}{100}$
- (b) Convert $0.\dot{7}$ to a fraction. Circle the correct answer:
- $\frac{1}{7}$ $\frac{7}{10}$ $\frac{7}{9}$ $\frac{7}{100}$

Decimals to Fractions - Exam Questions

- 1) (a) Write $\frac{2}{5}$ as a decimal.

.....
(1)

- (b) Write $\frac{13}{20}$ as a decimal.

.....
(1)

- (c) Write $\frac{3}{11}$ as a decimal.

.....
(1)
(3 marks)

-
- 2) Circle the decimal equivalent to $2\frac{5}{8}$.

2.58

2.85

2.125

2.625

(1 mark)

-
- 3) (a) Write 0.63 as a fraction.

.....
(1)

- (b) Write 0.12 as a fraction in the simplest form.

.....
(2)

Decimals to Fractions - Exam Questions

- (c) Write 0.568 as a fraction in the simplest form.

.....
(2)
(5 marks)

-
- 4) Circle the fraction equivalent to $0.\dot{1}\dot{8}$

$$\frac{1}{8}$$

$$\frac{18}{100}$$

$$\frac{9}{50}$$

$$\frac{2}{11}$$

(1 mark)

Decimals to Fractions - Answers

	Question	Answer
	Skill Questions	
Group A	<p>Write these decimals as fractions. Give the fractions in their simplest term:</p> <p>1) 0.1</p> <p>2) 0.3</p> <p>3) 0.8</p> <p>4) 0.15</p> <p>5) 0.35</p> <p>6) 0.85</p> <p>7) 0.24</p> <p>8) 0.25</p> <p>9) 0.29</p> <p>10) 0.62</p> <p>11) 0.66</p> <p>12) 0.68</p>	<p>1) $\frac{1}{10}$</p> <p>2) $\frac{3}{10}$</p> <p>3) $\frac{4}{5}$</p> <p>4) $\frac{3}{20}$</p> <p>5) $\frac{7}{20}$</p> <p>6) $\frac{17}{20}$</p> <p>7) $\frac{6}{25}$</p> <p>8) $\frac{1}{4}$</p> <p>9) $\frac{29}{100}$</p> <p>10) $\frac{31}{50}$</p> <p>11) $\frac{33}{50}$</p> <p>12) $\frac{17}{25}$</p>
Group B	<p>Write these fractions as decimals. Some are recurring decimals:</p> <p>1) $\frac{1}{2}$</p> <p>2) $\frac{1}{3}$</p> <p>3) $\frac{2}{3}$</p> <p>4) $\frac{1}{5}$</p>	<p>1) 0.5</p> <p>2) $0.\dot{3}$</p> <p>3) $0.\dot{6}$</p> <p>4) 0.2</p>

Decimals to Fractions - Answers

Group B contd	<p>5) $\frac{3}{5}$</p> <p>6) $\frac{4}{5}$</p> <p>7) $\frac{1}{20}$</p> <p>8) $\frac{7}{20}$</p> <p>9) $\frac{19}{20}$</p> <p>10) $\frac{1}{25}$</p> <p>11) $\frac{8}{25}$</p> <p>12) $\frac{19}{25}$</p>	<p>5) 0.6</p> <p>6) 0.8</p> <p>7) 0.05</p> <p>8) 0.35</p> <p>9) 0.95</p> <p>10) 0.04</p> <p>11) 0.32</p> <p>12) 0.76</p>
Group C	<p>Write the equivalent fraction / decimal. Give the fractions in their simplest term.</p> <p>1) 0.35</p> <p>2) 0.36</p> <p>3) 0.54</p> <p>4) 0.56</p> <p>5) 0.71</p> <p>6) 0.75</p> <p>7) $\frac{1}{8}$</p> <p>8) $\frac{3}{8}$</p> <p>9) $\frac{1}{9}$</p> <p>10) $\frac{5}{9}$</p> <p>11) $\frac{1}{12}$</p> <p>12) $\frac{11}{12}$</p>	<p>1) $\frac{7}{20}$</p> <p>2) $\frac{9}{25}$</p> <p>3) $\frac{27}{50}$</p> <p>4) $\frac{14}{25}$</p> <p>5) $\frac{71}{100}$</p> <p>6) $\frac{3}{4}$</p> <p>7) 0.125</p> <p>8) 0.375</p> <p>9) 0.1</p> <p>10) 0.5</p> <p>11) 0.08$\dot{3}$</p> <p>12) 0.91$\dot{6}$</p>

Decimals to Fractions - Answers

	Question	Answer
	Applied Questions	
1)	<p>a) Write $\frac{2}{7}$ as a decimal. Give your answer to 4 decimal places.</p> <p>b) Write $\frac{9}{14}$ as a decimal. Give your answer to 4 decimal places.</p>	<p>a) 0.2857</p> <p>b) 0.6429</p>
2)	<p>a) Write 1.7 as a fraction. Give your answer as a mixed number.</p> <p>b) Write 3.14 as a fraction. Give your answer as a mixed number.</p>	<p>a) $1\frac{7}{10}$</p> <p>b) $3\frac{7}{50}$</p>
3)	<p>a) Write $1\frac{4}{25}$ as a decimal.</p> <p>b) Write $\frac{9}{4}$ as a decimal.</p>	<p>a) 1.16</p> <p>b) 2.25</p>
4)	<p>a) Convert 0.$\dot{3}$ to a fraction. Circle the correct answer: $\frac{1}{3}$ $\frac{1}{33}$ $\frac{3}{10}$ $\frac{33}{100}$</p> <p>b) Convert 0.$\dot{7}$ to a fraction. Circle the correct answer: $\frac{1}{7}$ $\frac{7}{10}$ $\frac{7}{9}$ $\frac{7}{100}$</p>	<p>a) $\frac{1}{3}$</p> <p>b) $\frac{7}{9}$</p>

Decimals to Fractions - Mark Scheme

	Question	Answer	
	Exam Questions		
1) (a)	Write $\frac{2}{5}$ as a decimal.	(a) 0.4	(1)
(b)	Write $\frac{13}{20}$ as a decimal.	(b) 0.65	(1)
(c)	Write $\frac{3}{11}$ as a decimal.	(c) $0.\dot{2}\dot{7}$	(1)
2)	Circle the decimal equivalent to $2\frac{5}{8}$ 2.58 2.85 2.125 2.625	2.625	(1)
3) (a)	Write 0.63 as a fraction.	(a) $\frac{63}{100}$	(1)
(b)	Write 0.12 as a fraction in the simplest form.	(b) $\frac{12}{100}$ $\frac{3}{25}$	(1) (1)
(c)	Write 0.568 as a fraction in the simplest form.	(c) $\frac{568}{1000}$ or $\frac{56.8}{100}$ $\frac{71}{125}$	(1) (1)
4)	Circle the fraction equivalent to $0.\dot{1}\dot{8}$ $\frac{1}{8}$ $\frac{18}{100}$ $\frac{9}{50}$ $\frac{2}{11}$	$\frac{2}{11}$	(1)

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