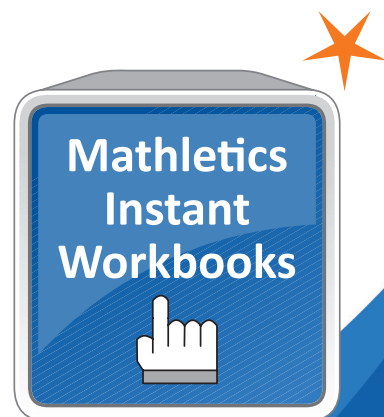
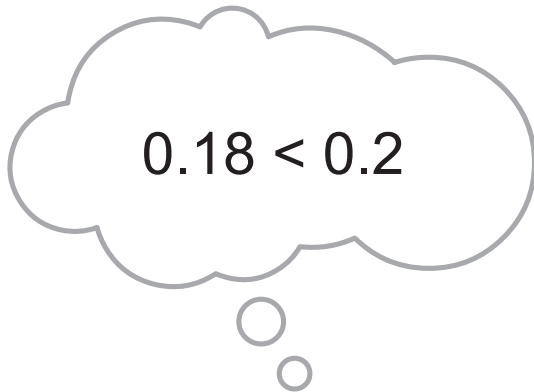




Decimals



Decimals

Student Book - Series H 2

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Author of The Topics and Topic Tests: AS Kalra

Decimals

Topic 1: Place value

QUESTION 1 Write the following decimal numbers in expanded form.

	Hundreds	Tens	Units	.	Tenths	Hundredths	Thousandths
a		1	5	.	8		
b		6	3	.	4	7	
c	2	5	7	.	5	9	
d			9	.	3	6	2
e	4	3	8	.	0	0	5
f	7	0	9	.	2	0	7

a _____

b _____

c _____

d _____

e _____

f _____

QUESTION 2 Write the following as decimal numbers.

a seven-tenths = _____ b nine-hundredths = _____

c six and three-hundredths = _____

d nine hundred and seventeen and three-thousandths = _____

e $8 + 6 \text{ tenths} + 7 \text{ hundredths} =$ _____

QUESTION 3 Write the following in expanded form.

a $3.689 =$ _____

b $69.305 =$ _____

c $0.837 =$ _____

QUESTION 4 Write the following in decimal form.

a $8 + \frac{3}{10} =$ _____ b $4 \frac{10}{10} + 5 \frac{1}{10} + 9 \frac{1}{100} =$ _____

c $9 \frac{100}{100} + 5 \frac{10}{10} + 7 \frac{1}{10} + 6 \frac{1}{1000} =$ _____

QUESTION 5 Write the next three terms to complete the following.

a 0.2, 0.5, 0.8, _____, _____, _____

b 0.32, 0.34, 0.36, _____, _____, _____

c 0.510, 0.514, 0.518, _____, _____, _____

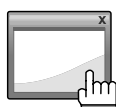
QUESTION 6 Complete each sentence.

a 83.67: the 6 in the _____ place means _____.

b 6.375: the 7 in the _____ place means _____.

c 9.678: the 9 in the _____ place means _____.

d 95.62: the 9 in the _____ place means _____.



Decimals

Topic 2: Changing fractions to decimals

QUESTION 1 Write the following as decimals.

a $\frac{7}{10} =$ _____ b $\frac{9}{10} =$ _____ c $\frac{41}{10} =$ _____ d $\frac{63}{10} =$ _____

e $\frac{3}{100} =$ _____ f $\frac{15}{100} =$ _____ g $\frac{86}{100} =$ _____ h $\frac{139}{100} =$ _____

i $\frac{642}{1000} =$ _____ j $\frac{835}{1000} =$ _____ k $\frac{5637}{10000} =$ _____ l $\frac{893}{10000} =$ _____

QUESTION 2 Change to decimals.

a $8 + \frac{9}{10} =$ _____ b $16 + \frac{4}{100} =$ _____ c $39 + \frac{3}{100} =$ _____

d $15 + \frac{1}{100} =$ _____ e $92 + \frac{3}{10} =$ _____ f $125 + \frac{6}{10} =$ _____

g $231 + \frac{36}{1000} =$ _____ h $89 + \frac{1}{10} =$ _____ i $57 + \frac{9}{10} =$ _____

QUESTION 3 Change each fraction to a decimal.

a $\frac{1}{10} =$ _____ b $\frac{4}{10} =$ _____ c $\frac{1}{100} =$ _____ d $\frac{16}{100} =$ _____

e $\frac{51}{1000} =$ _____ f $\frac{2}{5} =$ _____ g $\frac{3}{50} =$ _____ h $\frac{3}{4} =$ _____

i $\frac{1}{8} =$ _____ j $\frac{4}{125} =$ _____ k $\frac{3}{8} =$ _____ l $\frac{7}{8} =$ _____

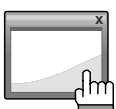
QUESTION 4 Express as decimals.

a $\frac{7}{7} =$ _____ b $\frac{8}{50} =$ _____ c $\frac{3}{5} =$ _____ d $\frac{143}{100} =$ _____

e $\frac{67}{1000} =$ _____ f $\frac{32}{20} =$ _____ g $\frac{39}{50} =$ _____ h $\frac{203}{100} =$ _____

i $\frac{493}{1000} =$ _____ j $\frac{7}{500} =$ _____ k $\frac{9}{250} =$ _____ l $\frac{16}{50} =$ _____

m $\frac{31}{25} =$ _____ n $\frac{9}{20} =$ _____ o $\frac{215}{1000} =$ _____ p $\frac{15}{500} =$ _____



Decimals

Topic 3: Changing decimals to fractions

QUESTION 1 Write the following as fractions in simplest form.

- | | | | |
|------------------------|------------------------|------------------------|------------------------|
| a 0.5 = _____ | b 0.7 = _____ | c 0.9 = _____ | d 1.1 = _____ |
| e 0.39 = _____ | f 0.031 = _____ | g 0.359 = _____ | h 0.07 = _____ |
| i 0.6 = _____ | j 0.28 = _____ | k 0.123 = _____ | l 0.4 = _____ |
| m 0.001 = _____ | n 0.008 = _____ | o 0.09 = _____ | p 0.003 = _____ |

QUESTION 2 Change the following decimals to mixed numbers in simplest form.

- | | | | |
|------------------------|------------------------|------------------------|------------------------|
| a 1.3 = _____ | b 2.5 = _____ | c 3.8 = _____ | d 7.91 = _____ |
| e 8.2 = _____ | f 6.4 = _____ | g 9.5 = _____ | h 11.25 = _____ |
| i 4.02 = _____ | j 9.01 = _____ | k 6.007 = _____ | l 8.014 = _____ |
| m 19.23 = _____ | n 28.34 = _____ | o 36.95 = _____ | p 50.6 = _____ |

QUESTION 3 Change each decimal to a fraction in simplest form.

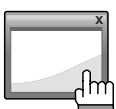
- | | | | |
|------------------------|------------------------|------------------------|------------------------|
| a 3.2 = _____ | b 8.5 = _____ | c 9.2 = _____ | d 0.8 = _____ |
| e 1.75 = _____ | f 8.06 = _____ | g 9.5 = _____ | h 6.30 = _____ |
| i 9.006 = _____ | j 6.05 = _____ | k 8.6 = _____ | l 14.35 = _____ |
| m 16.84 = _____ | n 32.35 = _____ | o 48.25 = _____ | p 31.04 = _____ |

QUESTION 4 Express each as a fraction in simplest form.

- | | | | |
|------------------------|------------------------|-------------------------|------------------------|
| a 0.23 = _____ | b 0.128 = _____ | c 0.36 = _____ | d 0.84 = _____ |
| e 0.002 = _____ | f 0.004 = _____ | g 0.0009 = _____ | h 0.005 = _____ |
| i 1.5 = _____ | j 2.8 = _____ | k 3.7 = _____ | l 9.25 = _____ |
| m 8.3 = _____ | n 7.5 = _____ | o 6.35 = _____ | p 5.55 = _____ |

QUESTION 5 Express as a fraction in simplest form.

- | | | | |
|------------------------|------------------------|-------------------------|-------------------------|
| a 0.08 = _____ | b 0.04 = _____ | c 0.05 = _____ | d 0.06 = _____ |
| e 1.002 = _____ | f 2.004 = _____ | g 3.008 = _____ | h 5.001 = _____ |
| i 12.01 = _____ | j 18.02 = _____ | k 43.06 = _____ | l 92.08 = _____ |
| m 1.8 = _____ | n 2.6 = _____ | o 3.1 = _____ | p 4.2 = _____ |
| q 8.01 = _____ | r 9.05 = _____ | s 12.001 = _____ | t 18.002 = _____ |



Decimals

Topic 4: Addition and subtraction of decimals

QUESTION 1 Add the following.

- | | | | | | |
|---|---------------------|---|---------------------|---|---------------------|
| a | $3 + 5.8 =$ _____ | b | $8 + 9.7 =$ _____ | c | $9 + 6.31 =$ _____ |
| d | $5 + 10.32 =$ _____ | e | $4 + 8.6 =$ _____ | f | $9 + 3.5 =$ _____ |
| g | $6.1 + 3 =$ _____ | h | $0.8 + 9 =$ _____ | i | $0.35 + 6 =$ _____ |
| j | $8.3 + 9 =$ _____ | k | $0.5 + 0.8 =$ _____ | l | $0.9 + 0.3 =$ _____ |
| m | $5.3 + 3.6 =$ _____ | n | $8.2 + 1.6 =$ _____ | o | $9.2 + 8.9 =$ _____ |

QUESTION 2 Subtract the following.

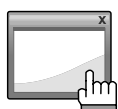
- | | | | | | |
|---|-----------------------|---|-----------------------|---|------------------------|
| a | $0.9 - 0.2 =$ _____ | b | $8.3 - 5.1 =$ _____ | c | $9.5 - 6.2 =$ _____ |
| d | $10.6 - 3.3 =$ _____ | e | $15.6 - 8.7 =$ _____ | f | $12.6 - 10.9 =$ _____ |
| g | $15.7 - 8.8 =$ _____ | h | $6.37 - 5.18 =$ _____ | i | $9.3 - 6.5 =$ _____ |
| j | $8.25 - 3.67 =$ _____ | k | $9.38 - 2.59 =$ _____ | l | $16.36 - 7.87 =$ _____ |
| m | $9.2 - 2.3 =$ _____ | n | $0.88 - 0.79 =$ _____ | o | $0.59 - 0.47 =$ _____ |

QUESTION 3 Work out the following.

- | | | | | | | | |
|---|--|---|---|---|---|---|--|
| a | $\begin{array}{r} 65.9 + \\ 18.63 \\ \hline \end{array}$ | b | $\begin{array}{r} 57.36 + \\ 8.09 \\ \hline \end{array}$ | c | $\begin{array}{r} 41.35 + \\ 15.7 \\ \hline \end{array}$ | d | $\begin{array}{r} 36.127 + \\ 18.36 \\ \hline \end{array}$ |
| e | $\begin{array}{r} 83.95 - \\ 16.78 \\ \hline \end{array}$ | f | $\begin{array}{r} 25.93 - \\ 14.85 \\ \hline \end{array}$ | g | $\begin{array}{r} 63.48 - \\ 32.49 \\ \hline \end{array}$ | h | $\begin{array}{r} 118.32 - \\ 59.83 \\ \hline \end{array}$ |
| i | $\begin{array}{r} 581.39 - \\ 83.62 \\ \hline \end{array}$ | j | $\begin{array}{r} 156.105 - \\ 38.08 \\ \hline \end{array}$ | k | $\begin{array}{r} 6393.63 - \\ 89.78 \\ \hline \end{array}$ | l | $\begin{array}{r} 356.139 - \\ 48.321 \\ \hline \end{array}$ |

QUESTION 4 Add the following.

- | | | | | | | | |
|---|--|---|---|---|--|---|--|
| a | $\begin{array}{r} 8.69 + \\ 13.56 \\ 19.2 \\ \hline \end{array}$ | b | $\begin{array}{r} 18.65 + \\ 231.83 \\ 87.15 \\ \hline \end{array}$ | c | $\begin{array}{r} 15.231 + \\ 8.31 \\ 123.625 \\ \hline \end{array}$ | d | $\begin{array}{r} 14.63 + \\ 116.38 \\ 5.23 \\ \hline \end{array}$ |
| e | $\begin{array}{r} 91.981 + \\ 32.138 \\ 119.013 \\ \hline \end{array}$ | f | $\begin{array}{r} 234.65 + \\ 18.38 \\ 9.317 \\ \hline \end{array}$ | g | $\begin{array}{r} 23.612 + \\ 8.105 \\ 19.31 \\ \hline \end{array}$ | h | $\begin{array}{r} 128.36 + \\ 19.58 \\ 3.61 \\ \hline \end{array}$ |



Decimals

Topic 5: Multiplication of decimals

QUESTION 1 Multiply the following.

- | | | | |
|------------------------|-------------------------|------------------------|-------------------------|
| a 0.3 2 = _____ | b 0.05 7 = _____ | c 8.6 9 = _____ | d 4.3 6 = _____ |
| e 0.8 3 = _____ | f 0.8 4 = _____ | g 5.2 3 = _____ | h 3.8 3 = _____ |
| i 0.7 5 = _____ | j 1.3 5 = _____ | k 6.4 7 = _____ | l 8.6 5 = _____ |
| m 1.3 6 = _____ | n 3.2 4 = _____ | o 9.2 2 = _____ | p 9.25 4 = _____ |

QUESTION 2 Work out the following.

- | | | |
|-----------------------------|----------------------------|---------------------------|
| a 8.3 10 = _____ | b 5.32 100 = _____ | c 0.38 100 = _____ |
| d 125.34 100 = _____ | e 0.06 10 = _____ | f 8.6 100 = _____ |
| g 8.15 1000 = _____ | h 95.38 100 = _____ | i 9.8 10 = _____ |
| j 9.35 100 = _____ | k 9.36 100 = _____ | l 63.64 10 = _____ |

QUESTION 3 Calculate the following.

- | | | |
|----------------------------|-----------------------------|----------------------------|
| a 0.12 100 = _____ | b 8.13 100 = _____ | c 19.65 100 = _____ |
| d 26.36 100 = _____ | e 5.6 1000 = _____ | f 8.3 1000 = _____ |
| g 6.32 1000 = _____ | h 8.123 1000 = _____ | i 9.13 1000 = _____ |
| j 2.5 1000 = _____ | k 0.1 1000 = _____ | l 0.02 1000 = _____ |

QUESTION 4 Find these products.

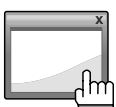
- | | | |
|----------------------------|------------------------------|--------------------------|
| a 0.2 20 = _____ | b 0.8 x 40 = _____ | c 9.3 60 = _____ |
| d 6.5 80 = _____ | e 3.2 x 10 = _____ | f 8.6 100 = _____ |
| g 5.25 1000 = _____ | h 6.18 10 000 = _____ | i 31.5 80 = _____ |
| j 6.5 90 = _____ | k 5.3 70 = _____ | l 8.15 50 = _____ |

QUESTION 5 Multiply the following.

- | | | |
|----------------------------|--------------------------|---------------------------|
| a 0.2 0.3 = _____ | b 0.3 0.8 = _____ | c 0.9 0.6 = _____ |
| d 9.2 0.3 = _____ | e 0.8 0.7 = _____ | f 0.6 0.3 = _____ |
| g 0.9 0.5 = _____ | h 0.9 0.6 = _____ | i 0.01 0.2 = _____ |
| j 0.6 0.002 = _____ | k 1.2 0.7 = _____ | l 8.3 0.8 = _____ |

QUESTION 6 Calculate the following.

- | | | |
|---------------------------|---------------------------|----------------------------|
| a 9.01 2.5 = _____ | b 9.25 3.1 = _____ | c 6.135 0.1 = _____ |
| d 2.364 3 = _____ | e 6.87 3.6 = _____ | f 8.65 1.2 = _____ |
| g 8.3 1.5 = _____ | h 9.25 0.1 = _____ | i 9.71 2.1 = _____ |
| j 5.63 0.3 = _____ | k 9.36 0.2 = _____ | l 1.25 0.4 = _____ |



Decimals

Topic 6: Division of decimals

QUESTION 1 Work out the following divisions.

- | | | | |
|-------------------------|--------------------------|-------------------------|--------------------------|
| a $3.6 \div 2 =$ _____ | b $8.4 \div 2 =$ _____ | c $9 \div 2 =$ _____ | d $11 \div 4 =$ _____ |
| e $5.75 \div 5 =$ _____ | f $6.25 \div 5 =$ _____ | g $1.25 \div 5 =$ _____ | h $8.4 \div 4 =$ _____ |
| i $7.2 \div 6 =$ _____ | j $9.6 \div 6 =$ _____ | k $12.6 \div 6 =$ _____ | l $18 \div 5 =$ _____ |
| m $58 \div 4 =$ _____ | n $0.954 \div 6 =$ _____ | o $16.8 \div 8 =$ _____ | p $120.4 \div 8 =$ _____ |

QUESTION 2 Calculate the following divisions.

- | | | |
|---------------------------|---------------------------|----------------------------|
| a $64 \div 10 =$ _____ | b $85 \div 10 =$ _____ | c $99 \div 10 =$ _____ |
| d $563 \div 10 =$ _____ | e $83.5 \div 10 =$ _____ | f $93.4 \div 10 =$ _____ |
| g $112.6 \div 10 =$ _____ | h $625.8 \div 10 =$ _____ | i $49.6 \div 100 =$ _____ |
| j $63.7 \div 100 =$ _____ | k $94.8 \div 100 =$ _____ | l $124.2 \div 100 =$ _____ |

QUESTION 3 Evaluate the following divisions.

- | | | |
|-----------------------------|-----------------------------|-----------------------------|
| a $32.1 \div 10 =$ _____ | b $48.6 \div 10 =$ _____ | c $59.7 \div 10 =$ _____ |
| d $63.8 \div 10 =$ _____ | e $9.2 \div 100 =$ _____ | f $19.6 \div 100 =$ _____ |
| g $29.36 \div 100 =$ _____ | h $129.5 \div 100 =$ _____ | i $72.5 \div 1000 =$ _____ |
| j $138.2 \div 1000 =$ _____ | k $243.9 \div 1000 =$ _____ | l $563.7 \div 1000 =$ _____ |

QUESTION 4 Calculate the following divisions.

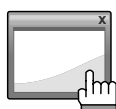
- | | | |
|----------------------------|-----------------------------|----------------------------|
| a $8.5 \div 50 =$ _____ | b $64.8 \div 40 =$ _____ | c $72.4 \div 400 =$ _____ |
| d $8.4 \div 30 =$ _____ | e $45.5 \div 500 =$ _____ | f $360.3 \div 300 =$ _____ |
| g $81.9 \div 90 =$ _____ | h $144.12 \div 300 =$ _____ | i $625.5 \div 50 =$ _____ |
| j $432.8 \div 800 =$ _____ | k $564.4 \div 4000 =$ _____ | l $9.45 \div 50 =$ _____ |

QUESTION 5 Divide the following.

- | | | |
|-----------------------------|-----------------------------|----------------------------|
| a $9.5 \div 0.5 =$ _____ | b $6.4 \div 0.4 =$ _____ | c $8.2 \div 0.2 =$ _____ |
| d $9.3 \div 0.3 =$ _____ | e $32.84 \div 0.04 =$ _____ | f $8.24 \div 0.08 =$ _____ |
| g $16.16 \div 0.08 =$ _____ | h $1.616 \div 0.4 =$ _____ | i $8.28 \div 0.4 =$ _____ |
| j $5.76 \div 0.4 =$ _____ | k $1.44 \div 0.12 =$ _____ | l $8.16 \div 0.8 =$ _____ |

QUESTION 6 Calculate the following.

- | | | |
|----------------------------|----------------------------|--------------------------|
| a $7.26 \div 0.6 =$ _____ | b $1.6 \div 0.08 =$ _____ | c $15.9 \div 10 =$ _____ |
| d $234.6 \div 100 =$ _____ | e $80.5 \div 0.5 =$ _____ | f $6.75 \div 50 =$ _____ |
| g $13.26 \div 3 =$ _____ | h $16.28 \div 40 =$ _____ | i $114 \div 12 =$ _____ |
| j $30.75 \div 5 =$ _____ | k $0.625 \div 0.5 =$ _____ | l $85.48 \div 4 =$ _____ |



Decimals

Topic 7: Comparing decimals

QUESTION 1 Which is greater?

- a 0.6 or 0.38 _____ b 0.345 or 0.35 _____ c 0.8 or 0.089 _____
d 5.3 or 0.53 _____ e 0.336 or 0.328 _____ f 0.982 or 0.892 _____

QUESTION 2 Which is smaller?

- a 0.1 or 0.11 _____ b 0.9 or 0.899 _____ c 5.3 or 5.29 _____
d 0.90 or 0.09 _____ e 0.0067 or 0.008 _____ f 4.58 or 4.058 _____

QUESTION 3 Arrange the following numbers in ascending order (smallest to largest).

- a 0.404, 0.44, 0.4, 0.04 _____
b 9.09, 0.909, 0.900, 0.009 _____
c 2.3, 2.03, 2.33, 2.003 _____
d 5.6, 56, 0.56, 0.056 _____
e 6.06, 606, 60.66, 606.6 _____

QUESTION 4 Arrange the following numbers in descending order (largest to smallest).

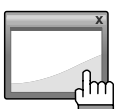
- a 7.37, 0.737, 73.7, 7.07, 7.77 _____
b 0.9, 9.9, 9.09, 0.009, 9.009 _____
c 2.8, 2.08, 2.008, 2.808, 8.208 _____
d 8.64, 8.064, 8.648, 86.4, 68.4 _____
e 3.13, 3.113, 31.13, 311.3, 0.3113 _____

QUESTION 5 True or false?

- a $0.18 < 0.2$ _____ b $0.90 > 0.9$ _____ c $3.6 < 0.36$ _____
d $0.6 = .6$ _____ e $0.488 < 0.4$ _____ f $0.0002 > 0.003$ _____

QUESTION 6 Complete the following using the signs $<$, $=$ or $>$.

- a 0.2 _____ 0.23 b 0.303 _____ 0.003 c 46.35 _____ 46.53
d 5.23 _____ 5.32 e 8.2 _____ 8.20 f 8.609 _____ 8.607
g 0.77 _____ 0.077 h 6.40 _____ 6.4000



Decimals

Topic 8: Recurring and repeating decimals

QUESTION 1 Which of the following are recurring decimals and which are terminating decimals?

- | | | |
|---------------------|------------------|----------------------|
| a 0.375 _____ | b 0.666... _____ | c 0.5 _____ |
| d $0.\dot{3}$ _____ | e 5.84 _____ | f 0.454 545... _____ |
| g 0.5777... _____ | h 0.6632 _____ | i 0.593 33... _____ |

QUESTION 2 Write the following recurring decimals in the shorter way.

- | | | |
|----------------------|----------------------|-------------------------|
| a 0.6666... _____ | b 0.454 545... _____ | c 0.818 181 81... _____ |
| d 0.1111... _____ | e 0.313 131... _____ | f 0.777 77... _____ |
| g 0.121 212... _____ | h 0.545 454... _____ | i 0.8888... _____ |

QUESTION 3 Which of the following are recurring decimals?

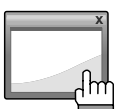
- | | | |
|-------------------------|------------------------|------------------------|
| a $\frac{3}{5}$ _____ | b $\frac{2}{3}$ _____ | c $5\frac{1}{8}$ _____ |
| d $\frac{7}{100}$ _____ | e $\frac{9}{18}$ _____ | f $\frac{5}{7}$ _____ |
| g $\frac{6}{7}$ _____ | h $\frac{1}{3}$ _____ | i $\frac{2}{9}$ _____ |

QUESTION 4 Write the following as recurring decimals.

- | | | |
|--------------------------|--------------------------|--------------------------|
| a $\frac{1}{3} =$ _____ | b $\frac{2}{3} =$ _____ | c $\frac{1}{6} =$ _____ |
| d $\frac{5}{33} =$ _____ | e $\frac{9}{11} =$ _____ | f $\frac{4}{11} =$ _____ |
| g $\frac{4}{9} =$ _____ | h $\frac{8}{27} =$ _____ | i $\frac{3}{7} =$ _____ |

QUESTION 5 Write as recurring decimals.

- | | | |
|---------------------------|--------------------------|--------------------------|
| a $\frac{9}{37} =$ _____ | b $\frac{5}{11} =$ _____ | c $\frac{8}{12} =$ _____ |
| d $\frac{4}{22} =$ _____ | e $\frac{8}{44} =$ _____ | f $\frac{5}{27} =$ _____ |
| g $\frac{10}{11} =$ _____ | h $\frac{2}{7} =$ _____ | i $\frac{4}{15} =$ _____ |
| j $\frac{2}{11} =$ _____ | k $\frac{5}{6} =$ _____ | l $\frac{4}{13} =$ _____ |



Decimals

Topic 9: Rounding off decimals

QUESTION 1 Express the following decimals correct to two decimal places.

- | | | |
|-------------------|-------------------|-------------------|
| a 3.8751 = _____ | b 8.652 = _____ | c 3.1283 = _____ |
| d 15.6231 = _____ | e 29.9315 = _____ | f 82.2518 = _____ |
| g 33.6157 = _____ | h 79.123 = _____ | i 38.0167 = _____ |
| j 59.208 = _____ | k 39.3486 = _____ | l 69.6723 = _____ |

QUESTION 2 Round off the following decimals correct to one decimal place.

- | | | |
|-------------------|------------------|------------------|
| a 23.368 = _____ | b 43.626 = _____ | c 69.861 = _____ |
| d 52.8534 = _____ | e 84.709 = _____ | f 73.355 = _____ |
| g 29.257 = _____ | h 63.164 = _____ | i 93.537 = _____ |
| j 32.817 = _____ | k 64.259 = _____ | l 71.128 = _____ |

QUESTION 3 Write the following decimals to the nearest tenth.

- | | | |
|------------------|------------------|------------------|
| a 20.529 = _____ | b 79.84 = _____ | c 33.736 = _____ |
| d 18.789 = _____ | e 37.215 = _____ | f 97.568 = _____ |
| g 43.827 = _____ | h 51.853 = _____ | i 65.377 = _____ |
| j 62.123 = _____ | k 85.832 = _____ | l 53.794 = _____ |

QUESTION 4 Write the following decimals to the nearest hundredth.

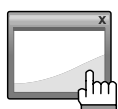
- | | | |
|------------------|------------------|-------------------|
| a 15.364 = _____ | b 56.751 = _____ | c 96.417 = _____ |
| d 28.638 = _____ | e 68.125 = _____ | f 112.863 = _____ |
| g 39.927 = _____ | h 75.764 = _____ | i 29.571 = _____ |
| j 43.234 = _____ | k 83.215 = _____ | l 38.642 = _____ |

QUESTION 5 Round off the following decimals to the number of decimal places shown in brackets.

- | | | |
|-----------------------|-----------------------|-----------------------|
| a 5.834 [1] = _____ | b 13.6145 [2] = _____ | c 54.6124 [3] = _____ |
| d 25.639 [2] = _____ | e 36.1231 [3] = _____ | f 63.827 [2] = _____ |
| g 93.2351 [3] = _____ | h 38.543 [1] = _____ | i 69.185 [2] = _____ |
| j 67.1385 [2] = _____ | k 43.865 [2] = _____ | l 72.239 [1] = _____ |

QUESTION 6 Round off to the number of decimal places shown in brackets.

- | | | |
|-----------------------|-----------------------|-----------------------|
| a 3.875 [1] = _____ | b 43.867 [2] = _____ | c 78.8614 [3] = _____ |
| d 10.671 [2] = _____ | e 56.3145 [2] = _____ | f 92.631 [1] = _____ |
| g 25.1283 [3] = _____ | h 73.214 [1] = _____ | i 86.123 [2] = _____ |
| j 39.256 [2] = _____ | k 68.137 [1] = _____ | l 97.235 [2] = _____ |



Decimals

Topic 10: Problem solving with decimals

1 Find the sum of 83.6 m, 6.9 m and 23.5 m

2 Add 312.9, 21.6 and 438.5

3 A rectangle is 4.95 cm long and 3.12 cm wide. Find its perimeter.

4 A room is 8.2 m long and 5.3 m wide. Find the area of the room.

5 Find the cost of 63 books at \$48.95 each.

6 Find the total length of 90 blocks of wood that are each 4.75 metres long.

7 A car travels 220.5 km each day. What distance does it travel in 200 days?

8 What is the difference between 12.35 and 6.24?

9 To the sum of 15.4 and 8.35, add the product of 0.8 and 2.5

10 From the sum of 53.67 and 138.56, take away 84.9

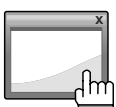
11 Find the difference between 2 and 0.0058

12 Subtract the smallest decimal from the largest: 0.0255 0.0268 0.0632 0.0603

13 A car can travel 8.35 km on 1 L of fuel. How far would it travel on a full tank of 60 L?

14 David is paid \$15.60 a week to mow the lawn. How much does he earn in a year?

15 6 kg of nuts cost \$56.70. What is the cost per kilogram?



Decimals

Topic Test

PART A

Instructions

This part consists of 12 multiple-choice questions

Each question is worth 1 marks

Fill in only ONE CIRCLE for each question

Calculators are NOT allowed

Time allowed: 15 minutes

Total marks = 12

					Marks
1	(0.3) ² equals				1
	(A) 0.09	(B) 0.9	(C) 9.0	(D) 0.03	
2	8.3 + 2.5 equals				1
	(A) 11.8	(B) 10.8	(C) 5.8	(D) 20.75	
3	6.7 – 4.71 equals				1
	(A) 2.53	(B) 11.41	(C) 1.99	(D) 2.99	
4	$3 + \frac{3}{10} + \frac{3}{1000}$ equals				1
	(A) 3.333	(B) 3.033	(C) 3.330	(D) 3.303	
5	0.625 ÷ 5 equals				1
	(A) 0.125	(B) 0.25	(C) 0.105	(D) 1.25	
6	Which is the largest?				1
	(A) 4.4	(B) 4.44	(C) 4.04	(D) 4.404	
7	20 ÷ 0.05 equals				1
	(A) 200	(B) 300	(C) 400	(D) 1000	
8	$1 - \frac{70}{1000}$ equals				1
	(A) 0.30	(B) 0.7	(C) 0.93	(D) 0.933	
9	Divide \$16.45 equally among 7 children.				1
	(A) \$2.65	(B) \$2.45	(C) \$2.35	(D) \$2.25	
10	Which is the smallest?				1
	(A) 0.21	(B) 0.122	(C) 0.12	(D) 0.121	

Decimals

Topic Test

PART A continued

				Marks
11	0.7 + 0.7 equals			
	(A) 0.77	(B) 1.4	(C) 7.1	(D) 0.49
12	5 3.27 equals			
	(A) 16.35	(B) 15.53	(C) 13.87	(D) 17.32
13	0.9 metres is			
	(A) 90 cm	(B) 9 cm	(C) 90 mm	(D) 9 mm
14	The average of 0.04, 0.4, 4.44 and 4.0 is			
	(A) 4.4	(B) 4.04	(C) 2.44	(D) 2.22
15	$\frac{1}{3}(3.7 + 6.2)$ equals			
	(A) 4.5	(B) 5.2	(C) 4.33	(D) 3.3
Total marks achieved for PART A				15

Decimals

Topic Test

PART B

Instructions This part consists of 15 questions
Each question is worth 1 marks
Write answers in the answers-only column

Time allowed: 20 minutes

Total marks = 15

Questions	Answers only	Marks
1 What is the value of 6 in the number 543.7612?	<hr/>	<div>1</div>
2 Write 8.452 in expanded form.	<hr/>	<div>1</div>
3 Arrange these numbers in ascending order: 0.3, 0.033, 0.33, 0.303	<hr/>	<div>1</div>
4 Insert < or >: 8.1 _____ 8.09	<hr/>	<div>1</div>
5 Write 0.6 as a fraction.	<hr/>	<div>1</div>
6 Add 4.35, 8.43 and 4.12	<hr/>	<div>1</div>
7 Evaluate $985.12 \div 1000$	<hr/>	<div>1</div>
8 Evaluate 4.5×0.2	<hr/>	<div>1</div>
9 Find the cost of 15 oranges at 16 cents each.	<hr/>	<div>1</div>
10 Evaluate $68.01 \div 3$	<hr/>	<div>1</div>
11 Evaluate $94.236 \div 1.2$	<hr/>	<div>1</div>
12 Write $\frac{1}{3}$ as a recurring decimal.	<hr/>	<div>1</div>
13 Round off 25.4752 to 2 decimal places.	<hr/>	<div>1</div>
14 Round off 481.637 to the nearest tenth.	<hr/>	<div>1</div>
15 Simplify $2.54 + 1.5 \times 4$	<hr/>	<div>1</div>

Total marks achieved for PART B

15

Decimals

Topic Test

PART C

Instructions This part consists of 4 questions
Each question is worth 5 marks
Show all necessary

Time allowed: 20 minutes

Total marks = 20

Questions	Marks
<p>1 Find answers to the following.</p> <p>a $1.34 + 2.6 =$ _____ b $5.6 - 3.9 =$ _____</p> <p>c $12.5 \div 5 =$ _____ d $48.5 \div 0.6 =$ _____</p> <p>e $0.84 \div 2 =$ _____</p>	5
<p>2 a Write 9.035 in expanded notation.</p> <p>_____</p> <p>b Arrange in descending order; 0.8, 0.12, 0.6 _____</p> <p>Evaluate the following.</p> <p>c $0.004 \div 0.5 =$ _____ d $(0.02)^2 =$ _____</p> <p>e $0.36 + 14.5 + 7 =$ _____</p>	5
<p>3 Say whether each of the following decimals is terminating or recurring.</p> <p>a 0.36 _____</p> <p>b 1.383 838... _____</p> <p>c 3.857 _____</p> <p>Round off the following decimals correct to 2 decimal places.</p> <p>d $89.683 =$ _____</p> <p>e $9.385 =$ _____</p>	5
<p>4 Write each of the following as a decimal.</p> <p>a $6\frac{55}{100} =$ _____ b $9 + \frac{3}{10} + \frac{7}{100} =$ _____</p> <p>c $7\frac{7}{1000} =$ _____ d $\frac{3}{8} =$ _____</p> <p>e $\frac{5}{6} =$ _____</p>	5

Total marks achieved for PART C

20