INTRODUCTION

Decimals and fractions are both ways to name all of the possible numbers that are less than one or are between whole numbers. Using decimals allows you to complete calculations using your calculator.

When you have completed this section you will be able to:

- ❒ Add, subtract, multiply and divide decimals.
- ❒ Convert fractions to decimals and decimals to fractions.
- ❒ Calculate decimals of a foot.
- ❒ Calculate decimals of an inch.
- ❒ Solve word problems using decimals.
- ❒ Solve applications using decimals.

PLACE VALUE

Understanding Place Value

All decimals have a value of less than one or less than a whole. You can compare a decimal fraction to a fraction whose denominator (bottom) is always a number like 10, 100, 1 000, 10 000 and so on.

Example :

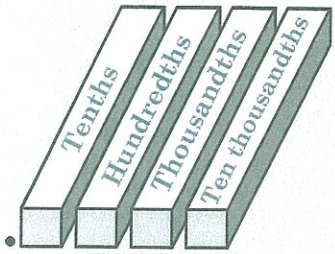
0.6 = 6 tenths = $\frac{6}{10}$

0.05 = 5 hundredths = $\frac{5}{100}$

0.32 = 32 hundredths = $\frac{32}{100}$

0.004 = 4 thousandths = $\frac{4}{1000}$

0.267 = 267 thousandths = $\frac{267}{1000}$



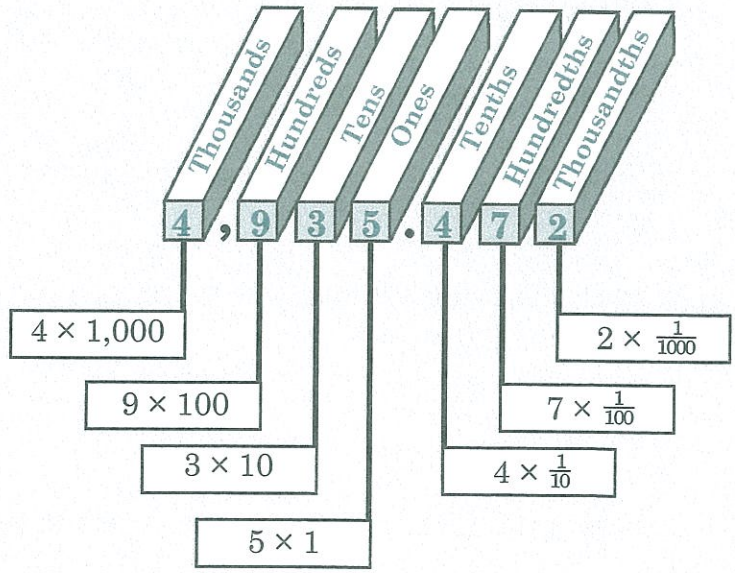
In decimal notation, only the numerator is actually written. You can figure out what the denominator is by the position of the decimal point.

Example : 4,935.472

0.4 = $\frac{4}{10}$

0.47 = $\frac{47}{100}$

0.472 = $\frac{472}{1000}$



Zeros in Decimal Numbers

Zeros hold place value, just like whole numbers.

Example :

$0.3 = \frac{3}{10}$

$0.03 = \frac{3}{100}$

$0.003 = \frac{3}{1000}$

You can add one or more zeros to the right side of the decimal number without changing the value of the number.

$0.3 = 0.30 = 0.300 = 0.3000 = \frac{3}{10}$

Rounding Decimal Numbers

You round decimal numbers the same way you round whole numbers. There is only one difference. After you round to a given decimal place, you drop all the numbers to the right of that number.

Step 1: Underline the number with the place value you are rounding off to.

Step 2: Look at the number to the right.
- 5 or more, round up
- less than 5, stay the same

Step 3: Drop all of the numbers to the right of the number you rounded off to.

Example 1:

Round 5.27 to the nearest tenth.

5.2̲7 Step 1: Underline the number with the place value you are rounding off to.

5.2Ⓠ Step 2: Look at the number to the right.

7 is greater than 5 so round up.

5.3 Step 3: Drop all of the numbers to the right of the number you are rounding off to.

Example 2:

Round 15.604 to the nearest hundredth.

5.6$\underline{0}$4 Step 1: Underline the number with the place value you are rounding off to.

15.60$\underline{4}$ Step 2: Look at the number to the right. 4 is less than 5 so stay the same.

15.60 Step 3: Drop all of the numbers to the right of the number you rounded off to.

Round off to the nearest tenth.

1) 5.43 2) 2.37 3) 15.398 4) 238.001

5) 17.938 6) 1.882 7) 456.709 8) 322.1622

Round off to the nearest hundredth.

1) 91.444 2) 26.375 3) 2.056 4) 1.005

5) 12.0384 6) 18.032 7) 5.0382 8) 0.01252

Round off to the nearest thousandth.

1) 1.0344 2) 10.5116 3) 19.9994 4) 32.76553

5) 155.3333 6) 43.8827 7) 26.7469 8) 717.2296

Reading Decimals

Step 1: Read the number. 0.56 ⟹ fifty-six

Step 2: Say the place value of the right-most number.
0.5<u>6</u> ⟹ fifty-six hundredths

⇓

hundredths

Mixed Decimals

Step 1: Read the whole number first. 10.35 ⟹ ten

Step 2: Read the decimal. 10 point

Step 3: Read the decimal part. 10 point thirty-five

Step 4: Say the place value of the right-most number.
Ten point thirty-five hundredths

Converting a Fraction to a Decimal

Step 1: Divide the numerator (top) by the denominator (bottom).

Examples:

$\frac{1}{4} = 1 \div 4 = 0.25$

$\frac{1}{2} = 1 \div 2 = 0.5$

$\frac{3}{4} = 3 \div 4 = 0.75$

Hint:

It's okay to say 'and' instead of point.

Hint:

Sometimes a decimal fraction will be written as 0.8. You do not need to say the zero. It is still 8/10.

Hint:

Check out the chapter on fractions for more information.

Convert the following fractions to decimals. Round off to the nearest thousandth.

1) $\frac{5}{8}$ 2) $\frac{1}{4}$ 3) $\frac{11}{16}$ 4) $\frac{3}{8}$

5) $\frac{1}{3}$ 6) $\frac{24}{56}$ 7) $\frac{33}{66}$ 8) $\frac{127}{227}$

Converting a Decimal to a Fraction

Step 1: Drop the decimal and draw a line under the number. This number is the numerator.

Step 2: Count the number of digits and write this many zeros. Write a 1 in front of the zeros. This number is the denominator.

Step 3: Express fractions in the lowest terms.

Example 1:

Convert 0.25 to a fraction.

$\underline{25}$ Drop the decimal and draw a line under the number. This number is the numerator.

$\frac{25}{100}$ Count the number of digits and write this many zeros. Write a 1 in front of the zeros. This is the denominator.

$\frac{1}{4}$ Express fractions in the lowest terms.

Hint:

See the chapter on fractions for how to express fractions in lowest terms.

Example 2:

Convert 6.75 to a fraction.

$6.\underline{75}$ Drop the decimal and draw a line under the number. This number is the numerator.

$6\frac{75}{100}$ Count the number of digits and write this many zeros. Write a 1 in front of the zeros. This is the denominator.

$6\frac{3}{4}$ Express fractions in the lowest terms.

Remember:

A mixed number has a whole number and a fraction.

Convert the following decimals to fractions.

1) 0.3

2) 0.7

3) 0.04

4) 0.39

5) 0.90

6) 0.004

7) 0.084

8) 0.091

9) 0.137	10) 0.871	11) 0.442	12) 0.0001
13) 6.4	14) 3.14	15) 7.02	16) 40.01
17) 0.15	18) 9.08	19) 31.812	20) 1.004
21) 328.76	22) 408.2	23) 6.222	24) 81.05

Adding Decimals

Step 1: Write the numbers in a column with the decimal points lined up.

Step 2: Add zeros as needed to the right of the decimal point.

Step 3: Add the same way you add whole numbers.

Step 4: Place the decimal point in your answer. Write it under the decimal point in the column you added.

Hint:

Taking the time to line up your numbers will actually save you time and increase your accuracy.

Example:

Add 2.085, 11.32 and 0.214

2.085	Line up decimals.
11.320	Add zeros as needed.
+ 0.214	Add the same way you add whole numbers.
13.619	Place the decimal point.

Add the following decimals.

1) 25.811 4.29 3	2) 62.4 20 9.82	3) 1.2147 12.54 1.88	4) 3.1076 16.4 3.2091

5) 7.2 m
0.841 m
0.02 m
1.9 m

6) 22.4 ft
4.22 ft
0.667 ft
5 ft

7) 7.3628
1.014
79.53
2.1006

8) 17.260
451.0001
1.989
92.7433

SUBTRACTING DECIMALS

Step 1: Write the numbers in a column with the decimal points lined up.

Step 2: Add zeros to the right of the decimal point.

Step 3: Subtract the same way you subtract whole numbers.

Step 4: Place the decimal point in your answer.
Put it under the decimal point in the column you subtracted.

Example:

A carpenter shortens a 2.815 m board by 1.267 m.
How long is the remaining piece?

$$\begin{array}{r} 2.815 \\ -\ 1.267 \\ \hline 1.548 \end{array}$$

The remaining piece is 1.548 m.

Subtract the following decimals.

1) $\begin{array}{r} 3.89 \\ -\ 1.45 \\ \hline \end{array}$

2) $\begin{array}{r} 8.8 \\ -\ 7.6 \\ \hline \end{array}$

3) $\begin{array}{r} 31.85 \\ -\ 20.63 \\ \hline \end{array}$

4) $\begin{array}{r} 30.88 \\ -\ 29.9 \\ \hline \end{array}$

5) $\begin{array}{r} 3.768 \\ -\ 1.549 \\ \hline \end{array}$

6) $\begin{array}{r} 3.5 \\ -\ 1.76 \\ \hline \end{array}$

7) $\begin{array}{r} 5.7 \\ -\ 4.667 \\ \hline \end{array}$

8) $\begin{array}{r} 700. \\ -\ 0.001 \\ \hline \end{array}$

MULTIPLYING DECIMALS

Step 1: Multiply the numbers as if there was no decimal.

Step 2: Count the total number of decimal places multiplied together.

Step 3: Start at the right of your answer and count the total number of decimal places. Count the same number of spaces and move the decimal place to the left. Place the decimal point.

Remember:

Put in more zeros if you need them.

Example 1:

1.3 1 decimal place
× 4 0 decimal place
5.2 1 decimal place

Example 2:

1.25 2 decimal places
× 1.2 1 decimal place
250
1250
1.500 3 decimal places

Example 3:

3.1416 4 decimal places
× 9.72 2 decimal places
62832
2199120
28274400
30.536352 6 decimal places

Multiply the following decimals.

1) 1.2 × 9

2) 2 × 0.4

3) 1.8 × 4

4) 2.1 × 1.3

5) 2.75 × 1.03

6) 2.18 × 0.85

7) 1.002 × 0.03

8) 48.2 × 0.001

Dividing Decimals by Whole Numbers

Step 1: Set up the problem like you do for whole number division.

Step 2: Place the decimal point directly above the decimal point of the number you are dividing into.

Step 3: Divide the same way you divide whole numbers.

Step 4: Check your answer using multiplication.

Rounding Off Answers:

Some division problems don't divide evenly. When this happens, divide until you have 1 more decimal place than needed. Round off your answer.

Example 1:

$75.6 \div 7 =$

$7\overline{)75.6}$ Set up the problem like you do for whole number division.

$7\overline{)75.6}$ Place the decimal point directly above the decimal point of the number you are dividing into.

$\begin{array}{r} 10.8 \\ 7\overline{)75.6} \end{array}$ Divide the same way you divide whole numbers.

$10.8 \times 7 = 75.6$ Check your answer using multiplication.

Example 2:

$12.9 \div 4 =$

$4\overline{)12.9}$ Set up the problem like you do for whole number division.

$4\overline{)12.9}$ Place the decimal point directly above the decimal point of the number you are dividing into.

$\begin{array}{r} 3.225 \\ 4\overline{)12.3} \end{array}$ Divide the same way you divide whole numbers.

$3.225 \times 4 = 12.9$ Check your answer using multiplication.

Dividing Decimal Numbers by Decimal Numbers

Step 1: Set up the problem like you do for whole number division.

Step 2: Move the decimal point in the divisor enough places to make it a whole number.

Step 3: Move the decimal point in the dividend the same number of places. Place the decimal point above.

Step 4: Divide the same way you divide whole numbers.

Step 5: Check your answer using multiplication.

Example 1:

$118.02 \div 2.1 =$

$2.1\overline{)118.02}$ Set up the problem like you do for whole number division.

$2\dot{1}.\overline{)1\dot{1}8.02}$ Move the decimal point in the divisor enough places to make it a whole number.

$21.\overline{)1180.2}$ Move the decimal point in the dividend the same number of places. Place the decimal point above.

$$21.\overline{)1180.2}\quad 56.2$$

Divide the same way you divide whole numbers.

$56.2 \times 2.1 = 118.02$ Check your answer using multiplication.

Divide the following decimals.
Round off your answers to the nearest thousandth.

1) $2\overline{)56.8}$ 2) $11\overline{)35.97}$ 3) $14\overline{).042}$ 4) $4\overline{)254.8}$

5) $6\overline{)3.462}$ 6) $3\overline{)9.822}$ 7) $2\overline{).525}$ 8) $10\overline{)1.874}$

9) $0.4\overline{)2.8}$ 10) $1.3\overline{)5.2}$ 11) $0.02\overline{).42}$ 12) $1.2\overline{).96}$

13) $115\overline{)13.8}$ 14) $0.08\overline{)2.040}$ 15) $0.33\overline{)9.999}$ 16) $1.15\overline{)27.55}$

17) $0.001\overline{)42}$ 18) $0.03\overline{)2.1}$ 19) $0.03\overline{)21.0}$ 20) $2.15\overline{)38.7}$

Decimals of a Foot

In North America, structures are usually laid out in feet, inches and fractions of an inch. Unfortunately, fractions are more difficult to use when estimating quantities and calculating differences in elevations. Because it is easier to perform calculations using whole numbers and decimals, it is important to know how to convert inches and fractions of an inch to decimals of a foot.

Decimals of a Foot Conversion Table

The table below, Decimals of a Foot Conversion Table, gives you all of the conversions from $\frac{1}{8}$" to 12" rounded off to two decimal places.

INCHES

FRACTIONS	0	1	2	3	4	5	6	7	8	9	10	11
0	.00	.08	.17	.25	.33	.42	.50	.58	.67	.75	.83	.92
$\frac{1}{8}$	.01	.09	.18	.26	.34	.43	.51	.59	.68	.76	.84	.93
$\frac{1}{4}$	.02	.10	.19	.27	.35	.44	.52	.60	.69	.77	.85	.94
$\frac{3}{8}$	.03	.11	.20	.28	.36	.45	.53	.61	.70	.78	.86	.95
$\frac{1}{2}$	.04	.13*	.21	.29	.38*	.46	.54	.63*	.71	.79	.88*	.96
$\frac{5}{8}$	.05	.14	.22	.30	.39	.47	.55	.64	.72	.80	.89	.97
$\frac{3}{4}$	.06	.15	.23	.31	.40	.48	.56	.65	.73	.81	.90	.98
$\frac{7}{8}$	.07	.16	.24	.32	.41	.49	.57	.66	.74	.82	.91	.99

* accounts for the $\frac{4}{100}$"s

Look at the shaded column on the left titled FRACTIONS. Notice that eighths are used. Although not perfectly accurate, $\frac{1}{8}$" is widely accepted as equal to $\frac{1}{100}$ of a foot.

$\frac{1}{8}$" = $\frac{1}{100}$" = 0.01"

Eighths are used because they are the closest to a hundred units in 12". There are 8 eighths in one inch. There are 96 eighths in 12".

Notice there are $\frac{4}{100}$" missing. The missing $\frac{4}{100}$"is accounted for evenly over the Decimals of a Foot Conversion Table: .13, .38, .63, .88.

Example 1:

What is the decimal of a foot equivalent for $\frac{5}{8}$"? $\frac{5}{8}$" = 0.05'

Locate the fractions row titled $\frac{5}{8}$.

Locate the inches. There are no full inches so locate the column titled **0**.

INCHES

FRACTIONS	0	1	2	3	4	5	6	7	8	9	10	11
0	.00	.08	.17	.25	.33	.42	.50	.58	.67	.75	.83	.92
$\frac{1}{8}$	.01	.09	.18	.26	.34	.43	.51	.59	.68	.76	.84	.93
$\frac{1}{4}$	.02	.10	.19	.27	.35	.44	.52	.60	.69	.77	.85	.94
$\frac{3}{8}$	.03	.11	.20	.28	.36	.45	.53	.61	.70	.78	.86	.95
$\frac{1}{2}$	.04	.13*	.21	.29	.38*	.46	.54	.63*	.71	.79	.88*	.96
$\frac{5}{8}$	**.05**	.14	.22	.30	.39	.47	.55	.64	.72	.80	.89	.97
$\frac{3}{4}$	.06	.15	.23	.31	.40	.48	.56	.65	.73	.81	.90	.98
$\frac{7}{8}$	.07	.16	.24	.32	.41	.49	.57	.66	.74	.82	.91	.99

Example 2:

What is the decimal of a foot equivalent for 10 $\frac{3}{4}$"?

10 $\frac{3}{4}$" = 0.90'

Locate the fractions row titled $\frac{3}{4}$. Locate the inches column titled 10.

INCHES

FRACTIONS	0	1	2	3	4	5	6	7	8	9	10	11
0	.00	.08	.17	.25	.33	.42	.50	.58	.67	.75	.83	.92
$\frac{1}{8}$	.01	.09	.18	.26	.34	.43	.51	.59	.68	.76	.84	.93
$\frac{1}{4}$	.02	.10	.19	.27	.35	.44	.52	.60	.69	.77	.85	.94
$\frac{3}{8}$	.03	.11	.20	.28	.36	.45	.53	.61	.70	.78	.86	.95
$\frac{1}{2}$	.04	.13*	.21	.29	.38*	.46	.54	.63*	.71	.79	.88*	.96
$\frac{5}{8}$	.05	.14	.22	.30	.39	.47	.55	.64	.72	.80	.89	.97
$\frac{3}{4}$	.06	.15	.23	.31	.40	.48	.56	.65	.73	.81	**.90**	.98
$\frac{7}{8}$	.07	.16	.24	.32	.41	.49	.57	.66	.74	.82	.91	.99

Write the decimal of a foot equivalent. Use the Decimals of a Foot Conversion Table.

1) $\frac{3}{4}$" =

2) $1\frac{5}{8}$" =

3) $6\frac{1}{8}$" =

4) 12" =

5) $8\frac{3}{8}$" =

6) 6" =

7) $7\frac{7}{8}$" =

8) $3\frac{3}{4}$" =

9) $1\frac{4}{16}$" =

10) $9\frac{10}{16}$" =

Quick Conversion Method

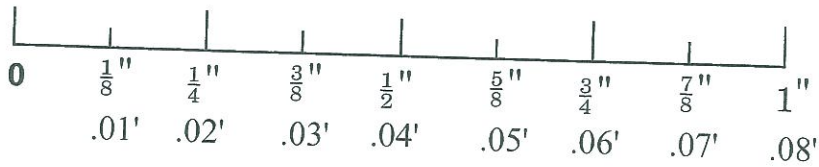
Although the conversion chart is a reliable means of converting fractions to decimals and decimals to fractions, it is impractical to carry around all the time.

The Quick Conversion Method converts inches and fractions of an inch to decimals of a foot by adding or subtracting eighths (.01')

Fractions of an Inch to Decimals of a Foot

Fraction	Decimal of a Foot
$\frac{1}{8}$"	.01'
$\frac{1}{4}$"	.02'
$\frac{3}{8}$"	.03'
$\frac{1}{2}$"	.04'
$\frac{5}{8}$"	.05'
$\frac{3}{4}$"	.06'
$\frac{7}{8}$"	.07'
1"	.08'

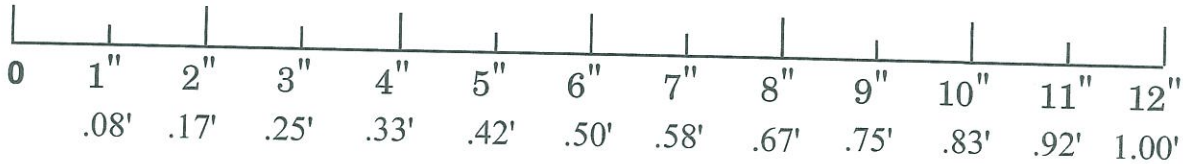
Note: ruler below is not to scale.



Inches to Decimals of a Foot

Inch	Decimal of a Foot
1"	.08'
2"	.17'
3"	.25'
4"	.33'
5"	.42'
6"	.50'
7"	.58'
8"	.67'
9"	.75'
10"	.83'
11"	.92'
12"	1.00'

Note: ruler below is not to scale.



Note: Avoid using .17', .33' .67' and .83' when using the quick conversion method. These are repeating decimals that make up the missing $\frac{4}{100}$ ths between 96 eighths and 100 hundredths.

Example 1:
Adding

Convert $5\frac{1}{2}$" to a decimal of a foot.

5" = .42' Locate inches in the table *Inches to decimals of a Foot.*

$+ \frac{1}{2}$" = .04' Locate fractions in the table *Fractions of an Inch to Decimals of a Foot.*

$5\frac{1}{2}$" = .46' Add the decimals.

Example 2:

Subtracting

Convert $9\frac{1}{4}"$ to a decimal of a foot.

$9" = .75'$ Locate inches in the table *Inches to decimals of a Foot.*

$-\frac{1}{4}" = .02'$ Locate fractions in the table *Fractions of an Inch to Decimals of a Foot.*

$8\frac{3}{4}" = .73'$ Subtract the decimals.

Convert the following from feet, inches and fractions to feet and decimals of a foot.

1) $9'\ 9\frac{1}{2}"$ 2) $3'\ 3\frac{3}{8}"$ 3) $6'\ 11\frac{1}{8}"$ 4) $1'\ 0\frac{5}{8}"$

5) $25'\ 4\frac{7}{8}"$ 6) $16'\ 5\frac{3}{4}"$ 7) $12'\ 1\frac{1}{4}"$ 8) $1'\ 6\frac{1}{4}"$

Convert feet and decimals of a foot to feet, inches and fractions.

1) 7.28' 2) 6.56' 3) 26.60' 4) 2.95'

5) 42.23' 6) 12.51' 7) 13.15' 8) 0.80'

PRACTICE

1) A trades worker buys a hammer for $18.00, a box of nails for $18.72, glue for $6.92 and a chisel for $13.77. Calculate the total.

2) Calculate the total number of board feet for the following list of materials.
Studs 650.57 board feet
Plates 312.75 board feet
Braces 134.25 board feet

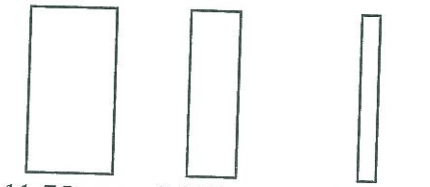
3) An apprentice glues 12 pieces of wood together, side by side. Each piece of wood is 0.038 m wide. Calculate the width of the new piece.

4) A tank holds 31.25 L. Fuel is 0.825 dollars per litre. Calculate the cost of the fuel.

5) A sheet of 0.019 m plywood is made up of 5 layers of equal thickness. Calculate the thickness of each layer.

6) A hammer that usually sells for $18.25 is reduced $1.99 in price. What is the new price?

7) The pieces shown below were glued together to form a chopping block. What is the total width of the block?



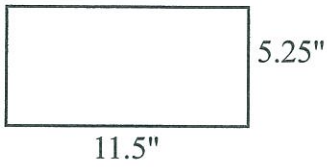
8) Calculate the difference in length between two boards that measure 4.877 m and 3.658 m.

9) On Tuesday, a crew poured 36.482 m^3 of concrete.
On Wednesday, the crew poured 27.595 m^3 of concrete.

a) Calculate the total the crew poured in two days. Round your answer to the nearest hundredth.

b) How much more did the crew pour on Tuesday than Wednesday? Round your answer to the nearest hundredth.

10) Calculate the total distance around the figure shown below.



11) An apprentice cut a piece 0.058 m long from a sheet of drywall that measures 2.440 m long. Calculate the length of the remaining piece of drywall.

12) There are 6 risers in a staircase that has a total rise of 1.146 m. What is the height of 1 riser?

13) Thirty-one sheets of plywood cost $482.36.

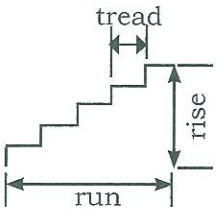
a) Calculate the cost of one sheet of plywood.

b) Calculate the cost of 8 sheets of plywood.

14) The first floor of a building is 0.415 m above grade. The first storey is 3.104 m, the second storey is 2.9 m and the third storey, to the top of the roof, is 3.519 m. What is the total height of the building?

15) It took 13.362 m^3 of concrete to make 17 identical footings. How much concrete did it take to make one footing?

16) The total run of a staircase that has five treads is 1.195 m. Calculate the width of one tread.



17) A contractor buys 103 hinges at $0.39 each. What is the total cost?

18) The distance between rungs, measured centre to centre, on a ladder is .305 m. What is the distance from the ground to the top of the 13th rung?

19) A contractor purchases lumber at $1.97 per board foot.

a) Calculate the cost of 2 board feet.

b) Calculate the cost of 1.667 board feet.

c) Calculate the cost of 32.5 board feet.

20) An apprentice is paid $16.82/hr. How much does the apprentice earn in a 37.5 hour work week?

ANSWER KEY

DECIMALS

Page 22, **Rounding Decimals.**

To the nearest tenth.

1)	5.4	2)	2.4	3)	15.4	4)	238.0
5)	17.9	6)	1.9	7)	456.7	8)	322.2

To the nearest hundredth.

1)	91.44	2)	26.38	3)	2.06	4)	1.01
5)	12.04	6)	18.03	7)	5.04	8)	0.01

To the nearest thousandth.

1)	1.034	2)	10.512	3)	19.999	4)	32.766
5)	155.333	6)	43.883	7)	26.747	8)	717.230

Page 23, **Converting Fractions to Decimals.**

1)	0.625	2)	0.250	3)	0.688	4)	0.375
5)	0.333	6)	0.429	7)	0.500	8)	0.559

Page 24, **Converting Decimals to Fractions.**

1) $\frac{3}{10}$ 2) $\frac{7}{10}$ 3) $\frac{4}{100} = \frac{1}{25}$ 4) $\frac{39}{100}$

5) $\frac{90}{100} = \frac{9}{10}$ 6) $\frac{4}{1000} = \frac{1}{250}$ 7) $\frac{84}{1000} = \frac{21}{250}$ 8) $\frac{91}{1000}$

9) $\frac{137}{1000}$ 10) $\frac{871}{1000}$ 11) $\frac{442}{1000} = \frac{221}{500}$ 12) $\frac{1}{10\,000}$

13) $\frac{4}{10} = 6\frac{2}{5}$ 14) $3\frac{14}{100} = 3\frac{7}{50}$ 15) $7\frac{2}{100} = 7\frac{1}{50}$

16) $40\frac{1}{100}$ 17) $\frac{15}{100} = \frac{3}{20}$ 18) $9\frac{8}{100} = 9\frac{2}{25}$

19) $31\frac{812}{1000} = 31\frac{203}{250}$ 20) $1\frac{4}{1000} = 1\frac{1}{250}$ 21) $328\frac{76}{100} = 328\frac{19}{25}$

22) $408\frac{2}{10} = 408\frac{1}{5}$ 23) $6\frac{222}{1000} = 6\frac{111}{500}$ 24) $81\frac{5}{100} = 81\frac{1}{20}$

Page 25, **Adding Decimals**

1) 33.101	2) 92.22	3) 15.6347	4) 22.7167
5) 9.961 m	6) 32.287 ft	7) 90.0074	8) 562.9924

Page 26, **Subtracting Decimals**

1) 2.44	2) 1.2	3) 11.22	4) 0.98
5) 2.219	6) 1.74	7) 1.033	8) 699.999

Page 27, **Multiplying Decimals**

1) 10.8	2) 0.8	3) 7.2	4) 2.73
5) 2.8325	6) 1.853	7) 0.03006	8) 0.0482

Page 30, **Dividing Decimals**

1) 28.4	2) 3.27	3) 0.003	4) 63.7
5) 0.577	6) 3.274	7) 0.2625	8) 0.1874
9) 7	10) 4	11) 21	12) 0.8
13) 0.12	14) 25.5	15) 30.3	16) 23.957
17) 42 000	18) 70	19) 700	20) 18

Decimals of a Foot

Page 33, **Decimals of a Foot.**

1) .06'	2) .14'	3) .51'	4) 1.0'
5) .70'	6) .50'	7) .66'	8) .31'
9) .10'	10) .80'		

Page 35, **Decimals of a Foot.**

1) 9.79'	2) 3.28'	3) 6.93'	4) 1.05'
5) 25.4'	6) 16.48'	7) 12.10'	8) 1.52'

Page 35, **Decimals of a Foot.**

1) $7' - 3\frac{3}{8}"$	2) $6' - 6\frac{3}{4}"$	3) $26' - 7\frac{1}{4}"$	4) $2' - 11\frac{3}{8}"$
5) $42' - 2\frac{3}{4}"$	6) $12' - 6\frac{1}{8}"$	7) $13' - 1\frac{7}{8}"$	8) $0' - 9\frac{5}{8}"$

Page 36, **Practice**

1) $57.41 2) 1 097.57 board feet 3) 0.456 m 4) $25.78

5) 0.0038 m 6) $16.26 7) 26.438 cm 8) 1.219 m

9 a) 64.077 m^3 = 64.08 m^3 b) 8.887 m^3 = 8.89 m^3

10) 33.5" 11) 2.382 m 12) 0.191 m

13 a) $15.56 b) $124.48 14) 9.938 m 15) 0.786 m^3

16) 0.239 m 17) $40.17 18) 3.965 m

19 a) $3.94 b) $3.28 c) $64.03 20) $630.75