

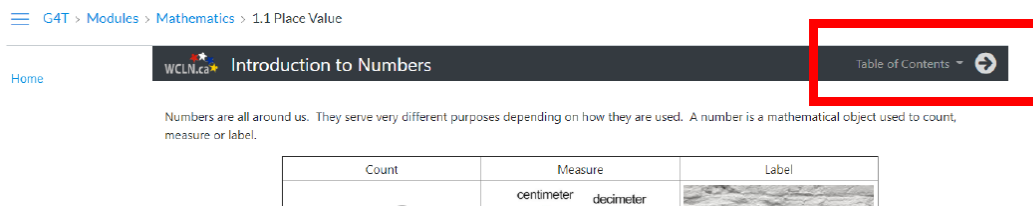
Grade 4 Mathematics
Week of November 16 – November 20

Lesson 2.4: Introduction to Adding and Subtracting Decimals

Lesson Materials

- Lessons for Section [2.4 Introduction to Adding and Subtracting Decimals](#)
- Introduction to Adding Decimals Learning Guide (This PDF)

Use the link above to open the lessons for this section. Remember: on the lesson page, use the arrow next to the “Table of Contents” at the **top of the page** to move through the lessons. You can also click on the Table of Contents to open the menu so you can jump to a specific lesson page.



Work through the online lessons for this section. You can work at your own pace or follow the suggested schedule below. Complete the activities in your Learning Guide as you work through the lessons. You can print the Learning Guide, or, copy out the questions on a separate piece of paper. Be sure to try the games and practice quizzes as you make your way through the online lesson book.

Suggested Lesson Schedule

<p>Monday</p> <ul style="list-style-type: none">• Introduction to Adding Decimals• Adding Decimals – A Close Look• Front-End Estimating and Adding• LG 2.4 #1-4, p. 16-17 <p>Tuesday</p> <ul style="list-style-type: none">• Subtracting Decimals• Front-End Estimating and Subtracting• LG #5-7, p. 17-18 <p>Wednesday</p> <ul style="list-style-type: none">• Placing Decimals• Word Problem Words• Practice #3• LG #8-9, p. 18-19	<p>Thursday</p> <ul style="list-style-type: none">• LG #10-14, p. 19-20 (*Remember to neatly show ALL steps taken when solving a word problem!) <p>Friday</p> <ul style="list-style-type: none">• Try these:• Addition with Decimals• Subtraction with Decimals
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2.4 ADDING AND SUBTRACTING DECIMALS

Step One: Line up the decimals.	Step Two: Pad with zeroes.	Step Three: Add using the standard algorithm, regrouping when needed.	Step Four: Include the decimal in the answer.
$\begin{array}{r} 1.42 \\ + 1.5 \\ \hline \end{array}$	$\begin{array}{r} 1.42 \\ + 1.50 \\ \hline \end{array}$	$\begin{array}{r} 1.42 \\ + 1.50 \\ \hline 2.92 \end{array}$	$\begin{array}{r} 1.42 \\ + 1.50 \\ \hline 2.92 \end{array}$

1. Use the steps for adding decimals to complete the following. Step one is already done for you.

- a)
$$\begin{array}{r} 3.52 \\ + 6.24 \\ \hline \end{array}$$

 b)
$$\begin{array}{r} 23.5 \\ + 46.68 \\ \hline \end{array}$$

 c)
$$\begin{array}{r} 89.46 \\ + 14.5 \\ \hline \end{array}$$

 d)
$$\begin{array}{r} 234.5 \\ + 78.91 \\ \hline \end{array}$$

2. Use the steps for adding decimals. Start by writing the question vertically, lining up the decimals and then the numbers by place value. The lines can help you to line everything up neatly.

a) $26.24 + 34.35$

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b) $54.32 + 198.7$

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c) $3542.1 + 468.06$

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d) $423.69 + 67.3$

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3. Use front end estimation for each sum. Write down your estimation and the sum. Remember you are only taking the whole number part for each decimal.

Example: $3.26 + 8.14 \rightarrow 3 + 8 = 11$

a. $2.54 + 7.16$

b. $4.19 + 3.86$

c. $0.76 + 1.29$

d. $5.76 + 3.18$

e. $0.47 + 1.29$

f. $2.08 + 3.80$

4. Jasmeet bought a pair of running shoes for \$89.95. She also bought a pair of joggers for \$46.25. Estimate the total cost of Jasmeet's purchases.

Step One: Line up the decimals.	Step Two: Pad with zeroes.	Step Three: Subtract using the standard algorithm, regrouping when needed.	Step Four: Include the decimal in the answer.
$ \begin{array}{r} 72.4 \\ - 36.68 \\ \hline \end{array} $	$ \begin{array}{r} 72.40 \\ - 36.68 \\ \hline \end{array} $	$ \begin{array}{r} 12 13 10 \\ 7\cancel{2}.4\cancel{0} \\ - 36.68 \\ \hline 46.72 \end{array} $	$ \begin{array}{r} 12 13 10 \\ 7\cancel{2}.4\cancel{0} \\ - 36.68 \\ \hline 46.72 \end{array} $

5. Use the steps for subtracting decimals to complete the following. Step one is already done for you.

a) 6.56	b) 63.5	c) 89.46	d) 234.5
$- 3.24$	$- 46.68$	$- 14.5$	$- 78.91$

6. Use the steps for subtracting decimals. Start by writing the question vertically, lining up the decimals and then the numbers by place value. The lines can help you to line everything up neatly.

a) $224.51 - 77.20$

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b) $111.12 - 44.4$

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c) $83.9 - 44.45$

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d) $6.76 - 5$

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7. Use front end estimation to find the difference. Write down your estimation and the difference. Remember you are using the front end of the decimal to determine your estimate.

Example: $9.42 - 8.14 \rightarrow 9 - 8 = 1$

a. $7.56 - 3.51$

b. $2.47 - 1.5$

c. $7.9 - 3.26$

d. $3.20 - 0.93$

e. $1.49 - 0.12$

f. $12.09 - 8.1$

8. The table shows the masses of 5 puppies. (Be careful. Some of these require estimates for adding and some require estimates for subtracting.)

a. Estimate the combined masses of:

Hank and Bob _____

Dora and Frank _____

Phineas and Bob _____

Dora and Phineas _____

Masses of Puppies	
Name	Mass (kg)
Hank	3.11
Dora	1.14
Phineas	1.93
Frank	2.79
Bob	1.27

b. Estimate the difference in masses of:

Frank and Phineas _____

Hank and Bob _____

Phineas and Dora _____

The heaviest and lightest puppy _____

9. Circle the better estimate.

a. $3.34 + 6.83$ 9 or 10

b. $4.31 - 0.13$ 3 or 4

10. Use front end estimation to decide where the decimal should be placed. Circle the best estimate.

Example: $25.02 + 11.16$ ($25 + 11$)

36.18 361.8 3.618

a. $16.23 + 1.14$
1.737 17.37 173.7

b. $200.1 + 212.04$
4.1214 41.214 412.14 4121.4

c. $19.32 + 8.1$
2.742 27.42 274.2

d. $16.23 - 11.14$
5.09 509 50.9

e. $227.15 - 212.04$
1511 151.1 15.11

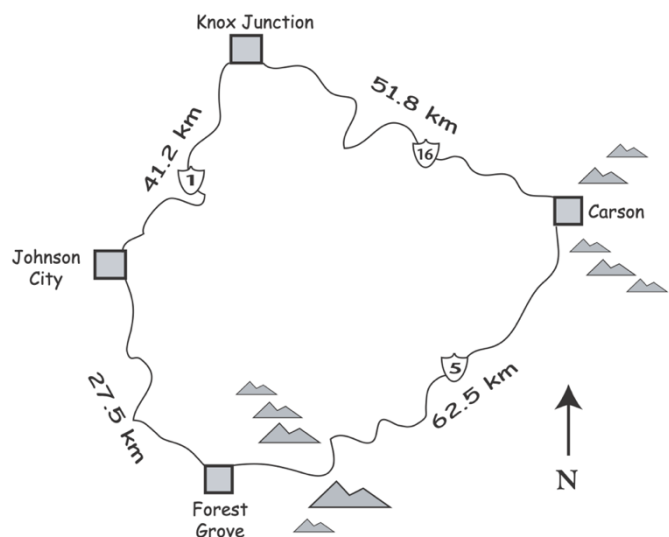
f. $9.32 - 8.11$
12.1 1.21 121

11. Use the road map to answer the problems. Show your work.

a) How far is it from Carson to Johnson City if you go through Forest Grove?

b) How far is it from Carson to Johnson City if you go through Knox Junction?

c) How much farther is it from Johnson City to Knox Junction than Johnson City to Carson?

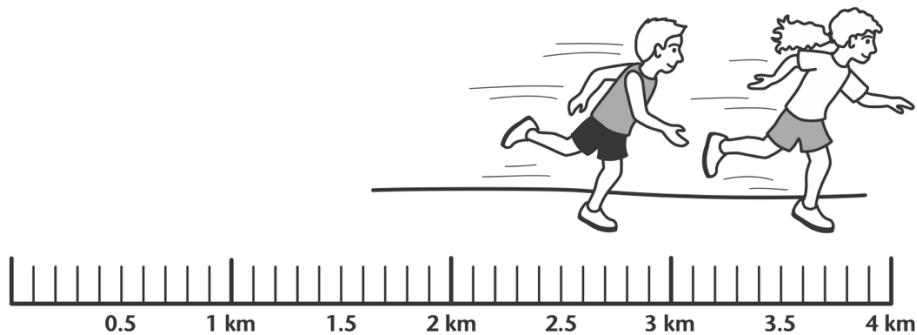


12. Al completed a 10 km run in 45.61 min. His brother Chris completed the same run in 43.2 min. How much faster was Al than Chris?

13. Jenny jogged 6.2 km (kilometers) on Saturday and 4.82 km on Sunday. How far did she jog on the weekend?

14. Bob jogged 2.9 km (kilometers) while Elsa jogged 3.3 km.

a) Who jogged the greatest distance? Put each number on the number line to find out.



_____ jogged the greatest distance.

b) How much farther?