

Frequently Asked Questions

Q: How can you subtract decimals?

A1: You can use mental math.

For example, to calculate $10 - 5.98$, you first subtract 6.

$$10 - 6 = 4$$

Because 6 is 0.02 greater than 5.98, you have to add back 0.02 to 4. So, $10 - 5.98 = 4 + 0.02$ or 4.02.

A2: You can rename the greater number.

For example, to calculate $10 - 7.845$, rename 10 as $9.999 + 0.001$.

$$\begin{array}{r} 9.999 + 0.001 \\ -10.000 \\ - 7.845 \\ \hline 2.154 + 0.001 = 2.155 \end{array}$$

You can also rename 10 as $9.998 + 0.002$ (instead of $9.999 + 0.001$), and then you would add back 0.002 instead of 0.001.

A3: You can regroup the greater number to make the lesser number easier to subtract.

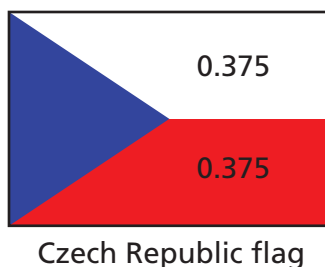
For example, to calculate $13.906 - 6.837$, regroup 13.906.

	13	8	9	16
	13	.9	0	6
-	6	.8	3	7
	7	.0	6	9

Practice

Number of Milk Containers Collected

Month	Number of Containers
October	15 561
November	20 412
December	



Lesson 1

1. A recycling company hopes to collect 50 000 milk containers in three months to raise money for a food bank. About how many more containers does it need to collect? Explain how you estimated.

Lesson 2

2. An elevator can carry 3000 kg safely. Can the elevator carry these three crates safely? Explain how you solved the problem by estimating or calculating.

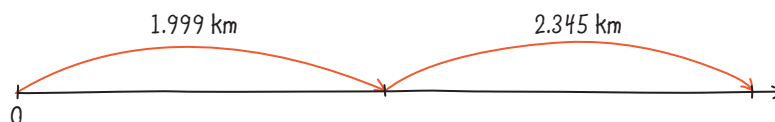


Lesson 3

3. Estimate the decimal for the portion of the Czech Republic flag that is blue.

Lesson 4

4. Solve each problem using mental math.
 - a) A movie ticket costs \$8.95 and popcorn costs \$4.95, including taxes. What is the total cost?
 - b) What is the total distance?



Lesson 5

5. Calculate. Choose two of your answers and explain how you know that they are reasonable.
 - a) $4.767 + 1.307$
 - b) $0.465 + 0.238$
 - c) $6.569 + 1.9$
 - d) $0.776 + 2.58$
6. Estimate to place the decimal point in each sum. Show your work for one of your answers.
 - a) $1.66 + 2.39 = 405$
 - b) $15.77 + 18.47 = 3424$
 - c) $0.186 + 5.196 + 0.205 = 5587$
 - d) $0.9 + 1.49 + 4.999 = 7389$



Lesson 7

7. For a nutrition project, Mark measured the masses of different kinds of fruit and the masses of their rinds or peels. What is the mass of each fruit without its rind or peel? Explain how you know that your answers are reasonable.

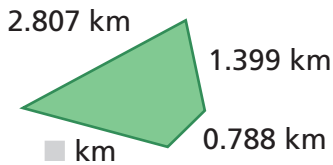
Mass of Fruit and Its Rind or Peel

Fruit	Mass of fruit with rind or peel (kg)	Mass of rind or peel (kg)
watermelon	1.505	0.497
banana	0.208	0.083
orange	0.195	0.064

8. Calculate. Choose one of your answers and explain how you know that it is reasonable.
- a) $10 - 5.499$ b) $4.465 - 0.278$

Lesson 8

9. The perimeter of the park is 7 km.
- a) What is the missing length?
b) How do you know that your answer is reasonable?
10. Estimate to place the decimal point in each difference. Show your work for one of your answers.
- a) $10 - 4.567 = 5433$ c) $5 - 1.196 = 3804$
b) $15 - 6.9 = 81$ d) $4 - 0.567 = 3433$



What Do You Think Now?

Look back at **What Do You Think?** on page 81. How have your answers and explanations changed?