Warm Up

Add or subtract

2) 15.3007 - 3.24

1) 101.75 + 62.574

$$
\begin{array}{r}
101.750 \\
+\ 062.574 \\
\hline
164.324
\end{array}
$$

$$
\begin{array}{r}
15.3007 \\
-\ 3.2400 \\
\hline
12.0607
\end{array}
$$

Use rounding to round the following to the tenths place

a) 4.289   b) 15.987   c) 101.238

4.3   16.0   101.2

Use front end estimation to add the following

12.36 + 14.97 + 7.02

$$
\begin{array}{r}
+1 \\
12 \\
15 \\
+\ \ 7 \\
\hline
34
\end{array}
$$

Grade 7 Ch 3 Extra Practice 3

Lesson 3.3: Adding and Subtracting Decimals

1. Use front-end estimation to estimate each sum or difference.
    a) 9.043 + 0.9 + 1.15

    $$\begin{array}{r} 9 \\ 1 \\ + \quad 1 \\ \hline \end{array} \to 11$$

    b) 2.09 + 4.6 + 1.8

    $$\begin{array}{r} 2 \\ 4 \\ + \quad 2 \\ \hline 9 \end{array}$$

    c) 9.6 – 7.4

    $$\begin{array}{r} 10 \\ - \quad 7 \\ \hline 3 \end{array}$$

    d) 50.4 – 5.04

    $$\begin{array}{r} 50 \\ - \quad 5 \\ \hline 45 \end{array}$$

2. Add or subtract. Use estimation to check the answers are reasonable.
    a) 7.56 + 0.07 + 122.7

    b) 7.85 – 6.93

    c) 2.2 – 1.68

    d) 83.07 + 0.42 + 7.7

3. Althea bought 3.6 kg of beef, 1.7 kg of cheese, 3 kg of fish and 2.28 kg of rice. What was the total mass she had to carry?

4. The Andersons can take one of two routes to their cabin on the lake. If they take the highway route, the distance from their home to the cabin is 156.7 km. If they take the more scenic route, the distance is 189.4 km. How much longer is the scenic route than the highway route?

5. One summer, the average price for a litre of gasoline in Edmonton was $1.147 while the average price for a litre of gasoline in Victoria was $1.234. How much more did a litre of gasoline cost in Victoria than in Edmonton that summer? Write your answer to the nearest cent.

$$
\begin{array}{r}
1.234 \\
-\ 1.147 \\
\hline
0.087
\end{array}
$$

tenths
hundredths

$0.09 in the difference :)

6. Find two numbers with a sum of 254.791.

$$
\begin{array}{r}
121.241 \\
+\ 133.550 \\
\hline
254.791
\end{array}
$$

7. A student added 2.35 + 4.256 and got the sum 4.491.
   a) What mistake did the student make?

They did not line up the decimals!

   b) What is the correct answer?

$$
\begin{array}{r}
2.350 \\
+\ 4.256 \\
\hline
6.606
\end{array}
$$

1 - 7

1. Use front-end estimation to estimate each sum or difference.
   a) 2.876 − 0.975   **b)** 71.382 + 6.357
   c) 125.12 + 37.84   **d)** 9.7 − 1.36

2. The tallest building in the world is the Taipei 101 in Taiwan.
   Its height is 0.509 km. The tallest building in North America
   is the Sears Tower in Chicago, USA. Its height is 0.442 km.
   What is the difference in the heights of the buildings?

3. Four classes of students from Mackenzie School are planning
   a field trip. The total cost of the trip is $1067.50.
   To date, the classes have raised: $192.18, $212.05, $231.24, $183.77
   a) How much money have the classes raised so far?
   b) How much more money do the classes need to raise in total?
   Show your work.

4. **Assessment Focus** A baker wants to make 3 different kinds of
   chocolate chip cookies. The recipes call for 2.75 kg, 4.4 kg, and 5.55 kg
   of chocolate chips. The baker has 10.5 kg of chocolate chips.
   a) How many kilograms of chocolate chips does the baker need?
       Estimate to check your answer is reasonable.
   b) Does the baker have enough chocolate chips to make the cookies?
       How do you know?
   c) The baker wants to follow the recipes exactly.
       If your answer to part b is no, how many more kilograms of chocolate
       chips are needed? If your answer to part b is yes, how many
       kilograms of chocolate chips will the baker have left over?

5. Estimate, then calculate, the sum below.
   Explain how you estimated.
   $46.71 + 3.9 + 0.875$

6. The Robb family and the Chan family have similar homes.
   The Robb family sets its thermostat to 20°C during the winter months.
   Its monthly heating bills were: $171.23, $134.35, and $123.21
   The Chan family used a programmable thermostat to lower the
   temperature at night, and during the day when the family was out.
   The Chan family's monthly heating bills were: $134.25, $103.27,
   and $98.66
   a) How much money did each family pay to heat its home
      during the winter months?
   b) How much more money did the Robb family pay?
      Estimate to check your answer is reasonable.
   c) What other things could a family do to reduce its heating costs?

7. Find two numbers with a difference of 151.297.

Attachments

Grade 7 Ch 3 Extra Practice 3 decimal PDF.pdf