Skills Practice

Rounding Decimals

Round each decimal to the indicated place-value position.

1. 54.38; ones
2. 2.671; tenths

3. $87.01; tens
4. 12.0905; tenths

5. 441.031; ones
6. 7.892; tenths

7. 20.2093; hundredths
8. 5.5252; ones

9. 16.01; tens
10. 0.58; tenths

11. 0.2859; hundredths
12. 145.15455; thousandths

13. $10.65; ones
14. 3.0188; thousandths

15. 0.01426; thousandths
16. 4.8255; thousandths

17. 0.830528; ten-thousandths
18. 143.09354; ten-thousandths

19. 0.0523413; ten-thousandths
20. 137.892; hundredths
3-3 Word Problem Practice

Rounding Decimals

POPULATION For Exercises 1 and 2, use the table.
The table shows the number of people in the United States per square mile.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of people per square mile of land area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>57.4</td>
</tr>
<tr>
<td>1980</td>
<td>64.0</td>
</tr>
<tr>
<td>1990</td>
<td>70.3</td>
</tr>
<tr>
<td>2000</td>
<td>79.6</td>
</tr>
</tbody>
</table>

1. Round the decimal for the number of people per square mile in 2000 to the nearest tens. Then round it to the nearest ones.

2. Round the decimal for the number of people per square mile in 1970 to the nearest tens. Then round it to the nearest ones.

EVERGLADES For Exercises 3–7, use the following information.
The Everglades National Park gets an average of 59.10 inches of rainfall a year. It had 1.181351 million visitors in 2004, and its budget for 2003 was $13.958 million.

3. How much rain does the Everglades National Park receive each year rounded to the nearest inch?

4. How many visitors did the park have rounded to the nearest tenth of a million?

5. How many visitors did the park have rounded to the nearest ten-thousandth of a million?

6. What is the budget to the nearest million?

7. What is the budget to the nearest hundredth of a million?

8. SNOWBOARDING Mike, Jake, and Aaron are buying snowboards. Mike is getting his snowboard on sale for $219.49. Jake’s costs $279.97. Aaron’s costs $234.95. Round each snowboard price to the nearest dollar.
3-3 Study Guide and Intervention
Rounding Decimals

To round a decimal, first underline the digit to be rounded. Then look at the digit to the right of the place being rounded.
- If the digit is 4 or less, the underlined digit remains the same.
- If the digit is 5 or greater, add 1 to the underlined digit.

Example 1
Round 6.58 to the nearest tenth.

<table>
<thead>
<tr>
<th>Underline the digit to be rounded.</th>
<th>Look at the digit to the right of the underlined digit.</th>
<th>Since the digit to the right is 8, add one to the underlined digit.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.58</td>
<td>6.58</td>
<td>6.6</td>
</tr>
</tbody>
</table>

To the nearest tenth, 6.58 rounds to 6.6.

Example 2
Round 86.943 to the nearest hundredth.

<table>
<thead>
<tr>
<th>Underline the digit to be rounded.</th>
<th>Look at the digit to the right of the underlined digit.</th>
<th>Since the digit is 3 and 3 &lt; 5, the digit 4 remains the same.</th>
</tr>
</thead>
<tbody>
<tr>
<td>86.943</td>
<td>86.943</td>
<td>86.94</td>
</tr>
</tbody>
</table>

To the nearest hundredth, 86.943 rounds to 86.94.

Exercises
Round each decimal to the indicated place-value position.

1. 3.21; tenths
2. 2.0505; thousandths
3. 6.5892; hundredths
4. 235.709; hundredths
5. 0.0914; thousandths
6. 34.35; tenths
7. 500.005; hundredths
8. 2.5134; tenths
9. 0.0052; thousandths
10. 0.0052; hundredths
11. 131.1555; thousandths
12. 232.88; tenths
3-3 Practice

Rounding Decimals

Round each decimal to the indicated place-value position.

1. 8.239; tenths
2. 3.666; tenths
3. 4.47; ones
4. 10.86; ones
5. 3.299; hundredths
6. 20.687; hundredths
7. 2.3654; thousandths
8. 69.0678; thousandths
9. 5.58214; hundredths
10. 468.09156; thousandths
11. $46.49; tens
12. 1,358.761; tens

13. LANGUAGES In the United States, about 1.64 million people speak French as their primary language. Round this number to the nearest million.

14. SHOPPING The price of a pound of cooked shrimp was $3.29. How much was this to the nearest dollar?

15. COMPUTERS Crystal has filled up 13.57 gigabytes of her computer’s hard drive. Round this amount to the nearest tenth of a gigabyte.

16. CURRENCY Recently, one Canadian dollar was equal to 0.835125 U.S. dollars. Round this amount of U.S. dollars to the nearest cent.

CALCULATOR A calculator will often show the results of a calculation with a very long decimal. Round each of the numbers on the calculator displays to the nearest thousandth.

17. $35.67381216$
18. $1342.409448$
19. $0.5235128864$

20. RACING The table shows the times for a canoe paddling race at summer camp. Will it help to round these times to the nearest tenth before listing them in order from least to greatest? Explain.

<table>
<thead>
<tr>
<th>Canoe Race</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Cougars</td>
</tr>
<tr>
<td>Moose</td>
</tr>
<tr>
<td>Jack Rabbits</td>
</tr>
<tr>
<td>Bears</td>
</tr>
</tbody>
</table>

Chapter 3 42 Course 1