SKILL 4: Rounding Decimals

The rules for rounding decimals are similar to those for rounding whole numbers.

Example 1

Round 34.0692 to the nearest hundredth.

Step 1: Find the place to which you want to round.

Step 2: Look at the digit to its right.

Step 3: If this digit is 5 or greater, round up. If it is less than 5, round down.

Step 4: Drop the digits to the right.

34.0692 ⎯ 6 is in the hundredths place.

9 is to the right of 6 hundredths. 9 > 5, so round up by adding 1 to the 6 and dropping the remaining digits to the right.

34.07 Round up to 34 and 7 hundredths.

So, 34.0692 rounded to the nearest hundredth is 34.07.

Example 2

Round 3.97 to the nearest tenth.

3.97 The digit to the right of 9 tenths is 7, so round up.

4.0 The 0 in the tenths place shows rounding to the nearest tenth.

3.97 rounds to 4.0 when rounded to the nearest tenth.

Example 3

Round $6.35 to the nearest dollar.

$6.35 The whole number is 6. The digit to the right is less than 5, so round down by dropping the digits to the right of the 6.

$6.35 rounds to $6, or $6.00, when rounded to the nearest dollar.

Guided Practice

Round 0.249 to the nearest tenth.

1. The tenths digit is _____.

2. The digit to the right of the tenths digit is _____.

3. Do you round up or down? Why? _____

4. To the nearest tenth, 0.249 rounds to _____.

Name the place value of the underlined digit. Then round to this place.

5. 4.6̲52

6. 19.30̲4

7. 59̲.9

_____

_____

_____

SKILL 4: Practice

Give the place value of the underlined digit. Then round the number to this place value.

1. 42.4

2. 7.7961

3. 96.08

_____

_____

_____

_____

_____

_____

4. 1.881

5. 20.993

6. 13.2043

_____

_____

_____

_____

_____

_____

Round to the underlined place value.

7. 27.27

8. 191.85

9. 796.301

10. 7.094

_____

_____

_____

_____

11. 298.99

12. 0.555

13. 0.6921

14. 409.7

_____

_____

_____

_____

15. 0.607

16. 1.009

17. 33.255

18. 1.02479

_____

_____

_____

_____

19. 3.042

20. 8.1919

21. 50.96

22. 71.6

_____

_____

_____

_____

Marc said that to the nearest dollar, he spent $15.00 on a CD. Find each answer.

23. What is the least amount that Marc could have spent?

_____

24. What is the greatest amount that Marc could have spent?

_____

TEST PREP

25. Which shows 1.356 rounded to the nearest tenth?

Skill 4

A 1.3   **C** 1.35

B 1.4   **D** 1.36

26. Which is 0.06 written as a fraction?

Skill 2

F $\frac{6}{1,000}$ **H** $\frac{6}{100}$

G $\frac{6}{10}$ **J** $\frac{100}{6}$

Mixed Review for Section A

Why is a pencil like a riddle?

To find out why, find the answer to each exercise at the bottom of the page and write the letter on the blank above the answer.

G **1.** Write eight tenths as a decimal. _____

T **2.** Round 9.83 to the nearest whole number. _____

W **3.** 10.33 > _____. Which replaces the blank: 10.3, 10.333, or 10.4?

N **4.** Write $4\frac{5}{10}$ as a decimal. _____

N **5.** Estimate 2.225 − 0.66. Round to the nearest whole number. _____

O **6.** _____ < 1.06. Which replaces the blank: 1.6, 1.066, or 1.006?

D **7.** Round 0.942 to the nearest hundredth. _____

O **8.** 0.34 + 1.26 = _____

T **9.** Write thirty-seven hundredths as a decimal. _____

O **10.** Write $\frac{942}{1,000}$ as a decimal. _____

I **11.** Round 4.55 to the nearest tenth. _____

T **12.** 2.88 + 2.32 = _____

A **13.** 16.45 + 4.05 = _____

U **14.** Estimate 36.87 − 17.4. Round to the nearest whole number. _____

O **15.** _____ > 0.44. Which replaces the blank: 0.4, 0.404, or 0.444?

H **16.** Write 0.080 in hundredths. _____

I **17.** Write $\frac{37}{1,000}$ as a decimal. _____

O **18.** Estimate 178.55 − 79.2. Round to the nearest whole number. _____

P **19.** 3.42 − 2.9 = _____

S **20.** 6.3 + 3.12 = _____

I **21.** Write four and forty-four hundredths as a decimal. _____

T **22.** 6 − 3.995 = _____

___ ___ ___   ___ ___   ___ ___ ___ ___
4.6 2.005 9.42   4.5   1.6   0.8 0.942 100 0.94

___ ___ ___ ___ ___ ___ ___
10.3 0.037 10 0.08 0.444 20 0.37

___   ___ ___ ___ ___ ___
20.50   0.52 1.006 4.44 1 5.2

Section A: Introduction to Decimals