

a) If you saved \$2.00 on January 1, \$4.00 on February 1, \$6.00 on March 1, \$8.00 on April 1, and so on, how much money would you save in one year?

b) If you saved \$2.00 on January 1, \$4.00 on February 1, \$8.00 on March 1, \$16.00 on April 1, and so on. How much money would you save in one year?

Answer:

a)

$$2+4+6+8+10+12+14+14+18+20+22+24 = \$156.00$$

b)

$$\$8190.00$$

Objective: TSWBAT write and say decimals

Standard Form

0.75

seventy-five hundredths

=

Expanded Form

0.7

+

0.05

seven tenths

five hundredths

<i>Hundreds</i>	<i>Tens</i>	<i>Ones</i>		<i>Tenths</i>	<i>Hundredths</i>	<i>Thousandths</i>	<i>Ten-Thousandths</i>	<i>Hundred-Thousandths</i>	<i>Millionths</i>
		1	.	7	5	9			

1**EXAMPLE****Writing a Decimal in Expanded Form**

Fuel The price of a gallon of gasoline is \$1.759. Write 1.759 from the chart above in expanded form.

$$1.759 = \overset{\text{one}}{1} + \overset{\text{seven tenths}}{0.7} + \overset{\text{five hundredths}}{0.05} + \overset{\text{nine thousandths}}{0.009}$$

**Check Understanding**

When you read a decimal that is greater than 1, read the decimal point as "and." Be careful to read "and" for the decimal point only.

2 EXAMPLE Writing a Decimal in Words

Write 20.0408 in words.

20.0408 ← Four decimal places indicate ten-thousandths.
twenty and four hundred eight ten-thousandths

2a. Write 16,702.3 in words.

- a. sixteen thousand, seven hundred two and three
- b. sixteen thousand, seven hundred two and three hundredths
- c. sixteen thousand, seven hundred two and three ones
- d. sixteen thousand, seven hundred two and 3 tenths

2b. Write 1,670.234 in words.

- a. one thousand, six hundred seventy and two hundred thirty-four ten-thousandths
- b. one thousand, six hundred seventy and two hundred thirty-four tenths
- c. one thousand, six hundred seventy and two hundred thirty-four hundredths
- d. one thousand, six hundred seventy and two hundred thirty-four thousandths

2c. Write 1.67023 in words.

- a. one and sixty-seven thousand twenty-three ten-thousandths
- b. one and sixty-seven thousand twenty-three hundred-thousandths
- c. one and sixty-seven thousand twenty-three millionths
- d. one and sixty-seven thousand twenty-three hundred-thousands

3**EXAMPLE****Writing a Decimal in Standard Form**

Sports In the 2000 Olympic Games, the United States men's gymnastics team did not win a medal. Their score was one and thirty-six thousandths points too low. Write this number in standard form.

- 1 ← Write the whole number part.
- 1. ← Place the decimal point.
- 1. ■ ■ ■ ← Thousandths is 3 places to the right of the decimal point.
- 1. ■ 3 6 ← Place 36 to the far right.
- 1.036 ← Insert a zero for tenths.

3a. Blaine Wilson, a gymnast, scored nine and five hundred eighty-seven thousandths on the pommel horse. Write Blaine Wilson's score in standard form.

- a. 9.587
- b. 9.0587
- c. 9.00587
- d. 9.000587

3b. **Number Sense** In Blaine Wilson's score, which has the greater value, the 5 or the 7? Explain.

- a. The 7, since $7 > 5$.
- b. The 5, since $0.5 > 0.007$.

Homework, Pgs 10-11, 1-34

Write each decimal in expanded form.

1. 3.6

$$\underline{3 + 0.6}$$

3. 1.283

$$\underline{1 + 0.2 + 0.08 + 0.003}$$

5. 7.03

$$\underline{7 + 0.03}$$

7. 32.27

$$\underline{30 + 2 + 0.2 + 0.07}$$

2. 4.72

$$\underline{4 + 0.7 + 0.02}$$

4. 21.5

$$\underline{20 + 1 + 0.5}$$

6. 15.308

$$\underline{10 + 5 + 0.3 + 0.008}$$

8. 6.475

$$\underline{6 + 0.4 + 0.07 + 0.005}$$

Write each decimal in words.

9. 0.2

two tenths

10. 0.15

fifteen hundredths

12. 0.11

eleven hundredths

13. 0.60

sixty hundredths

15. 0.50

fifty hundredths

16. 0.4

four tenths

Write each decimal in standard form.

18. seven tenths

0.7

19. one tenth

0.1

21. seven hundredths

0.07

22. twenty-two hundredths

0.22

24. eighty hundredths

0.80

25. thirty hundredths

0.30