

6.1 Exercises

Check It Out!
 Help with Homework
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Vocabulary and Concept Check

MATCHING Match the decimal with its equivalent percent.

- | | | | |
|----------|---------|----------|-----------|
| 1. 0.42 | 2. 4.02 | 3. 0.042 | 4. 0.0402 |
| A. 4.02% | B. 42% | C. 4.2% | D. 402% |

5. **OPEN-ENDED** Write three different decimals that are between 10% and 20%.

6. **WHICH ONE DOESN'T BELONG?** Which one does *not* belong with the other three? Explain your reasoning.

70%

0.7

$\frac{7}{10}$

0.07



Practice and Problem Solving

Write the percent as a decimal.

- | | | |
|------------|------------|------------|
| 7. 78% | 8. 55% | 9. 18.5% |
| 10. 57.4% | 11. 33% | 12. 9% |
| 13. 47.63% | 14. 91.25% | 15. 166% |
| 16. 217% | 17. 0.06% | 18. 0.034% |

Write the decimal as a percent.

- | | | |
|-----------|------------|------------|
| 19. 0.74 | 20. 0.52 | 21. 0.89 |
| 22. 0.768 | 23. 0.99 | 24. 0.49 |
| 25. 0.487 | 26. 0.128 | 27. 3.68 |
| 28. 5.12 | 29. 0.0371 | 30. 0.0046 |

31. **ERROR ANALYSIS** Describe and correct the error in writing 0.86 as a percent.



$$0.86 = \underbrace{00.86}_{\text{error}} = 0.0086\%$$

32. **MUSIC** Thirty-six percent of the songs on your MP3 player are pop songs. Write this percent as a decimal.

33. **CAT** About 0.34 of the length of a cat is its tail. Write this decimal as a percent.

34. **COMPUTER** Write the percent of free space on the computer as a decimal.

Volume	Capacity	Free Space	% Free Space
(C:)	149 GB	133 GB	89 %



Car: 20%



School bus: 48%



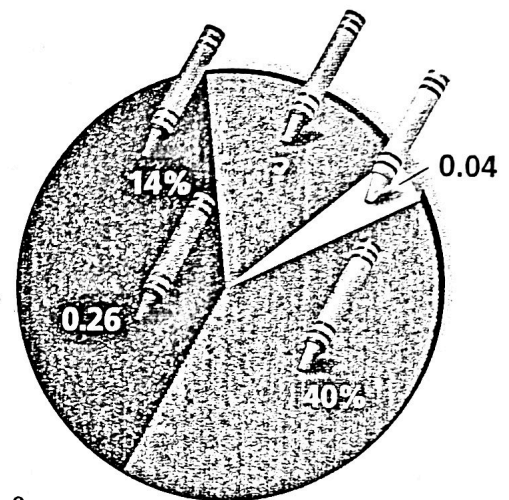
Bicycle: 8%

- Write the percents as decimals.
 - Write the percents as fractions.
 - What percent of students use another method to travel to school?
 - RESEARCH** Make a bar graph that represents how the students in your class travel to school.
39. **ELECTIONS** In an election, the winning candidate receives 60% of the votes. What percent of the votes does the other candidate receive?

40. **COLORS** Students in a class were asked to tell their favorite color.

- What percent said red, blue, or yellow?
- How many times more students said red than yellow?
- Use two methods to find the percent of students who said green. Which method do you prefer?

Favorite Color



41. **Problem Solving** In the first 42 Super Bowls, $0.1\bar{6}$ of the MVPs (most valuable players) were running backs.
- What percent of the MVPs were running backs?
 - What fraction of the MVPs were *not* running backs?



Fair Game Review

what you learned in previous grades & lessons

Write the decimal as a fraction or mixed number in simplest form.

(Skills Review Handbook)

42. 0.46

43. 0.31

44. 2.2

45. 4.32

Simplify the expression. (Section 3.1)

46. $4x + 3 - 9x$

47. $5 + 3.2n - 6 - 4.8n$

48. $2y - 5(y - 3)$

49. $-\frac{1}{2}(8b + 3) + 3b$

50. **MULTIPLE CHOICE** Ham costs \$4.48 per pound. Cheese costs \$6.36 per pound. You buy 1.5 pounds of ham and 0.75 pound of cheese. How much more do you pay for the ham? (Skills Review Handbook)

(A) \$1.41

(B) \$1.95

(C) \$4.77

(D) \$6.18