SOLVING PROPORTIONS Solve the proportion. Check your solution.

31. $\dfrac{b}{0.5} = \dfrac{9}{2.5}$
    32. $\dfrac{1.1}{1.2} = \dfrac{n}{3.6}$
    33. $\dfrac{2.1}{7.7} = \dfrac{v}{8.8}$
    34. $\dfrac{36}{54} = \dfrac{2x}{6}$

35. $\dfrac{3a}{4} = \dfrac{36}{12}$
    36. $\dfrac{10h}{108} = \dfrac{5}{9}$
    37. $\dfrac{6r}{10} = \dfrac{36}{15}$
    38. $\dfrac{12}{42} = \dfrac{4w}{56}$

39. $\dfrac{m+3}{8} = \dfrac{40}{64}$
    40. $\dfrac{5}{13} = \dfrac{k-4}{39}$
    41. $\dfrac{7}{112} = \dfrac{c-3}{8}$
    42. $\dfrac{6+n}{60} = \dfrac{15}{90}$

43. ⬥ **TAKS REASONING** Is it possible to write a proportion using the numbers 3, 4, 6, and 8? *Explain* your reasoning.

44. CHALLENGE If $\dfrac{a}{b} = \dfrac{c}{d}$ for nonzero numbers *a, b, c*, and *d*, is it also true

that $\dfrac{a}{c} = \dfrac{b}{d}$? *Explain*.

PROBLEM SOLVING

45. GOVERNMENT There are 435 representatives in the U.S. House of Representatives. Of the 435 representatives, 6 are from Kentucky. Find the ratio of the number of representatives from Kentucky to the total number of representatives.

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46. CONTEST Of the 30 champions of the National Spelling Bee from 1974 to 2003, 16 are boys. Find the ratio of the number of champions who are girls to the number who are boys.

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PIZZA SALES The table shows the number of pizzas sold at a pizzeria during a week. Use the information to find the specified ratio.

47. Small pizzas to large pizzas

48. Medium pizzas to large pizzas

49. Large pizzas to all pizzas

Size	Small	Medium	Large
Pizzas	96	144	240

50. READING A student can read 7 pages of a book in 10 minutes. How many pages of the book can the student read in 30 minutes?

51. SOCCER In the first 4 games of the season, a soccer team scored a total of 10 goals. If this trend continues, how many goals will the team score in the 18 remaining games of the season?

52. ◆ **MULTIPLE REPRESENTATIONS** A movie is filmed so that the ratio of the length to the width of the image on the screen is 1.85 : 1.

    a. Writing a Proportion Write and solve a proportion to find the length of the image on the screen when the width of the image is 38 feet.

    b. Making a Table Make a table that shows the length of an image when the width of the image is 20, 25, 30, 35, and 40 feet. Use your table to check the reasonableness of your answer to part (a).

○ = **WORKED-OUT SOLUTIONS**
on p. WS1
    ⬥ = **TAKS PRACTICE AND REASONING**
    ◆ = **MULTIPLE REPRESENTATIONS**