

14.3 and 14.4 Writing Proportions Worksheet

Use the table to write a proportion.

8.

	Game 1	Game 2
Points	12	18
Shots	14	w

9.

	May	June
Winners	n	34
Entries	85	170

10.

	Today	Yesterday
Miles	15	m
Hours	2.5	4

11.

	Race 1	Race 2
Meters	100	200
Seconds	x	22.4

12. **ERROR ANALYSIS** Describe and correct the error in writing the proportion.

~~X~~

	Monday	Tuesday
Dollars	2.08	d
Ounces	8	16

$$\frac{2.08}{16} = \frac{d}{8}$$

13. **T-SHIRTS** You can buy 3 T-shirts for \$24. Write a proportion that gives the cost c of buying 7 T-shirts.
14. **COMPUTERS** A school requires 2 computers for every 5 students. Write a proportion that gives the number c of computers needed for 145 students.
15. **SWIM TEAM** The school team has 80 swimmers. The ratio of seventh-grade swimmers to all swimmers is 5 : 16. Write a proportion that gives the number s of seventh-grade swimmers.

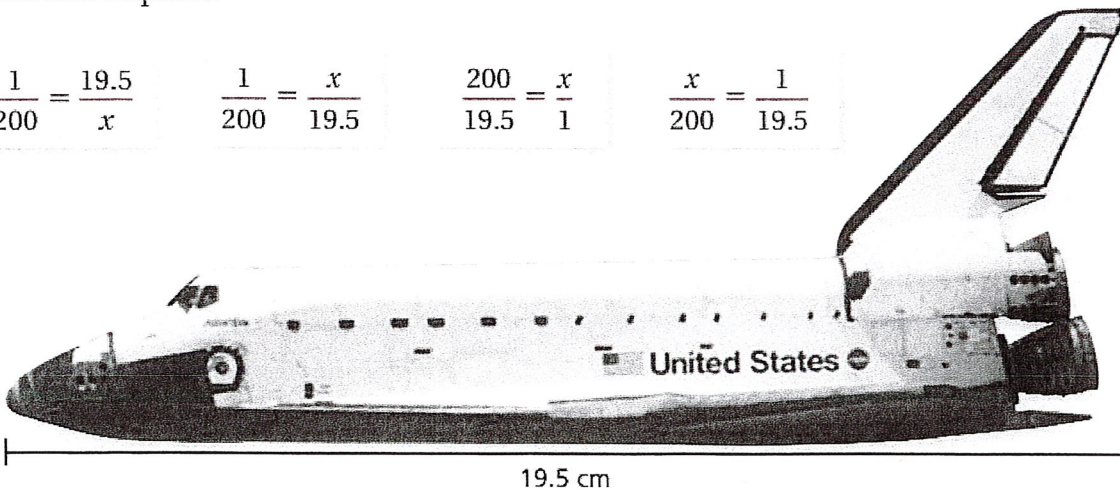
23. **ATLANTIS** Your science teacher has a 1 : 200 scale model of the space shuttle *Atlantis*. Which of the proportions can you use to find the actual length x of *Atlantis*? Explain.

$$\frac{1}{200} = \frac{19.5}{x}$$

$$\frac{1}{200} = \frac{x}{19.5}$$

$$\frac{200}{19.5} = \frac{x}{1}$$

$$\frac{x}{200} = \frac{1}{19.5}$$



Write and solve a proportion to complete the statement. Round to the nearest hundredth if necessary.

28. 6 km \approx mi

29. 2.5 L \approx gal

30. 90 lb \approx kg

35. **SWING SET** It takes 6 hours for 2 people to build a swing set. Can you use the proportion $\frac{2}{6} = \frac{5}{h}$ to determine the number of hours h it will take 5 people to build the swing set? Explain.

36. **REASONING** There are 144 people in an audience. The ratio of adults to children is 5 to 3. How many are adults?

37. **PROBLEM SOLVING** Three pounds of lawn seed covers 1800 square feet. How many bags are needed to cover 8400 square feet?

