Name __Answers_____ Date _____

Use the table to write a proportion.

① 8.

	Game 1	Game 2
Points	12	18
Shots	14	w

$$\frac{12}{14} = \frac{18}{w}$$

9.

	May	June
Winners	n	34
Entries	85	170

$$\frac{n}{85} = \frac{34}{170}$$

10.

	Today	Yesterday
Miles	15	m
Hours	2.5	4

$$\frac{15}{2.5} = \frac{m}{4}$$

11.

	Race 1	Race 2
Meters	100	200
Seconds	x	22.4

$$\frac{100}{x} = \frac{200}{22.4}$$

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

✗

	Monday	Tuesday
Dollars	2.08	d
Ounces	8	16

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

The proportion can't be written using diagnals of the table.

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

13. **T-SHIRTS** You can buy 3 T-shirts for $24. Write a proportion that gives the cost c of buying 7 T-shirts.

$$\frac{\$24}{3 \text{ shirts}} = \frac{c}{7 \text{ shirts}}$$

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.
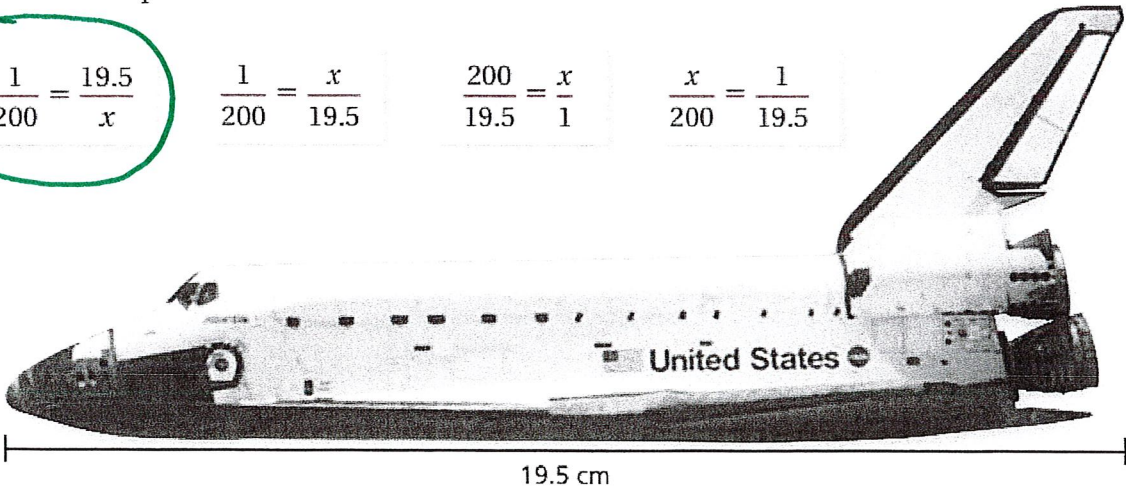
$$\frac{2 \text{ computers}}{5 \text{ students}} = \frac{c \text{ computers}}{145 \text{ students}}$$

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.

$$\frac{5 \text{ 7th Swim}}{16 \text{ Swimmers}} = \frac{s \text{ 7th Swim}}{80 \text{ Swimmers}}$$

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.

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

19.5 cm

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

③ **28.** 6 km ≈ ____ mi

3.7 mi

29. 2.5 L ≈ ____ gal

0.65 gal

30. 90 lb ≈ ____ kg

40.5 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.

no, not proportional. It Should take more people less time to build the Swingset.

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

90 adults

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

LAWN SEED 4 lbs

4 bags