

# Writing Proportions

Name: \_\_\_\_\_ Hour: \_\_\_\_\_ Date: \_\_\_\_\_

Use the table to write a proportion.

1.

	Game 1	Game 2
Points	12	18
Shots	14	$w$

2.

	May	June
Winners	$n$	34
Entries	85	170

3.

	Today	Yesterday
Miles	15	$m$
Hours	2.5	4

4.

	Race 1	Race 2
Meters	100	200
Seconds	$x$	22.4

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

✗

	Monday	Tuesday
Dollars	2.08	$d$
Ounces	8	16

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

**Directions: Write a proportion for each problem below.**

6. You can buy three T-shirts for \$24. Write a proportion that gives the cost  $c$  of buying seven T-shirts.

7. The school swim team has 80 swimmers. The ratio of 6<sup>th</sup> grade swimmers to all swimmers is 5:16. Write a proportion that gives the number  $s$  of 6<sup>th</sup> grade swimmers.

**Directions: Solve the proportions.**

8.  $\frac{1}{4} = \frac{z}{20}$

9.  $\frac{3}{4} = \frac{12}{y}$

10.  $\frac{35}{k} = \frac{7}{3}$

11.  $\frac{15}{8} = \frac{45}{c}$

12.  $\frac{b}{36} = \frac{5}{9}$

13. **ORCHESTRA** In an orchestra, the ratio of trombones to violas is 1 to 3.
- There are nine violas. Write a proportion that gives the number  $t$  of trombones in the orchestra.
  - How many trombones are in the orchestra?

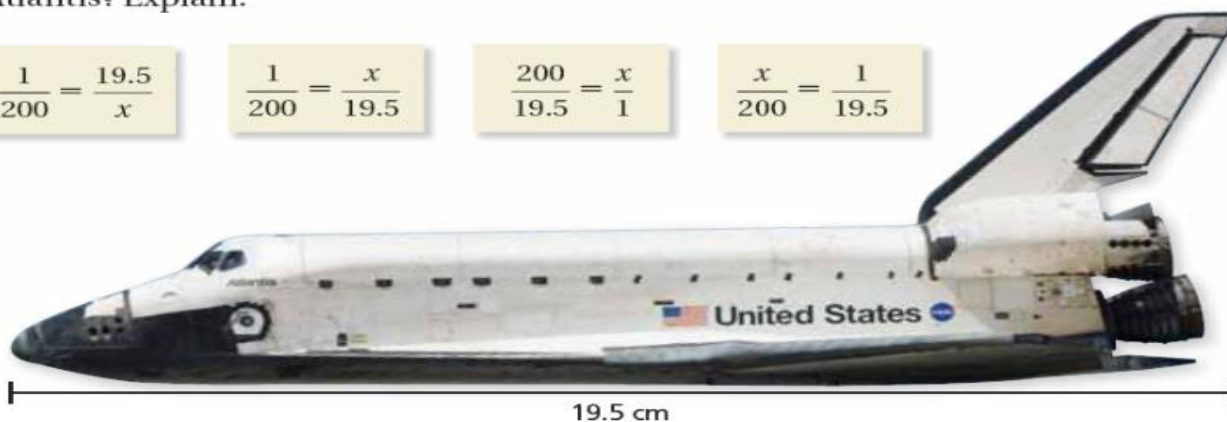
14. **ATLANTIS** Your science teacher has a 1 : 200 scale model of the Space Shuttle Atlantis. Which of the proportions can be used to find the actual length  $x$  of Atlantis? Explain.

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

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

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

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



15. **Reasoning** There are 180 white lockers in the school. There are 3 white lockers for every 5 blue lockers. How many lockers are in the school?



## Fair Game Review what you learned in previous grades & lessons

Solve the equation.

**SECTION 2.5**

16.  $\frac{x}{6} = 25$

17.  $8x = 72$

18.  $150 = 2x$

19.  $35 = \frac{x}{4}$

20. **MULTIPLE CHOICE** Which is the slope of a line?

**SECTION 3.2**

(A)  $\frac{\text{change in } y}{1}$

(B)  $\frac{\text{change in } x}{1}$

(C)  $\frac{\text{change in } x}{\text{change in } y}$

(D)  $\frac{\text{change in } y}{\text{change in } x}$