

**Ratio** - Write each ratio in **three different ways**.

1. hours in a day to days in a week	2. inches in a foot to feet in a yard
3. months in a year to students in your math class	4. sides on a triangle to sides on a square

**Rates, Unit Rate** – Write each ratio as a **rate and then as a unit rate**.

5. 24 points in 4 games	<b>RATE</b>	<b>UNIT RATE</b>	6. \$10 for 20 root beers	<b>RATE</b>	<b>UNIT RATE</b>
7. 28 cookies for 7 people	<b>RATE</b>	<b>UNIT RATE</b>	8. 50 kids on 2 soccer teams	<b>RATE</b>	<b>UNIT RATE</b>

**Proportions**

**SURVEY OF 36 PEOPLE**

School	Best at football	Best at basketball	Best at soccer
Texas A&M	16	1	2
Texas	14	9	8
Duke	0	18	12
North Carolina	6	8	14

9.	Based on the ratios above, write a proportion that can be used to find x, the number of people expected to choose Texas A&M as best at football if 45 people are surveyed.	
10.	Solve your proportion in #9.	
11.	Based on the ratios above, write a proportion that can be used to find y, the number of people expected to choose Duke as best at basketball if 50 people are surveyed.	
12.	Solve your proportion in #11.	
13.	Based on the ratios above, write a proportion that can be used to find z, the number of people expected to choose Texas as best at soccer if 63 people are surveyed.	
14.	Solve your proportion in #13.	
15.	Based on the ratios above, write a proportion that can be used to find q, the number of people expected to choose Texas A&M as best at soccer if 90 people are surveyed.	
16.	Solve your proportion in #15.	

17.	Mrs. Loewen's social studies class has 24 students and 8 globes. What is the ratio of students to globes? A. 8 to 1 B. 1 to 3 C. 1 to 8 D. 3 to 1	
18.	A computer virus caused 2 out of every 11 computers at DIS to crash. There are 88 computers at DIS. Which proportion can be used to find c, the number of computers that crashed? F. $\frac{(11-2)}{11} = \frac{c}{88}$ G. $\frac{2}{11} = \frac{c}{88}$ H. $\frac{2}{88} = \frac{c}{11}$ J. $\frac{88}{11} = \frac{2}{c}$	
19.	In the cafeteria on Friday there were 600 pieces of pizza for 150 students. What is the ratio of students to pieces of pizza? A. 4 to 1 B. 15 to 1 C. 1 to 4 D. 60 to 1	
20.	Which is the prime factorization of 36? F. $4 \cdot 9$ G. $3^3 \cdot 2^2$ H. $3 \cdot 4 \cdot 3$ J. $2^2 \cdot 3^2$	
21.	What is the median of the numbers 1 through 10?	
22.	What is the mode of the following: 3, 4, 7, 3, 4, 5?	
23.	At Albertson's, bananas are 3 for \$0.81. At Tom Thumb, bananas are 2 for \$0.56. At Kroger, bananas are 4 for \$1.16. Which store offers a better unit rate for bananas?	
24.	Write an algebraic expression to find the total amount of money spent by Tiffany. Tiffany decided to go shopping at The Gap. She bought jeans for \$26, three pairs of socks at \$8 each, and two shirts for \$15 each.	x =
25.	What is the difference between a rate and a proportion?	

