

Notes: Comparing and Scaling

What are the five ways of comparing numbers?	Ratios, Differences, Fractions, Percents, and Scaling
Give the definition and an example of each.	<p>Ratios: A ratio is a comparison of 2 quantities that tells the scale between them. Ratios may be expressed as fractions, a to b, or a:b. <i>In taste tests, people prefer Bolda Cola to Cola Nola by a ratio of 3 to 2.</i></p> <p>Technically speaking all comparisons are ratios.</p>
	<p>Differences: How far apart the two numbers are (the answer to a subtraction problem). <i>Students who prefer TV outnumber those who prefer radio by 20</i></p>
	<p>Fractions: A comparison of a part given as the numerator, and the whole given as the denominator. <i>3/5 of cola drinkers prefer Bolda Cola to Cola Nola</i></p>
	<p>Percents: Changing the fraction to a percent. One way of doing this is to take the numerator and divide by the denominator and multiply the quotient by 100 (or move the decimal two places to the right). <i>28% of people aged 12-17 go camping</i></p>
	<p>Scaling: This deals with how many times bigger or smaller something is. If you take your destination divided by the original, the quotient is your scale. In the example the destination is TV, which was 60, and the original was radio, which was 40. When I take $60/40=1.5$ <i>The number of students who prefer watching TV is 1.5 times the number who prefers listening to radio.</i></p>
What are the three different types of ratios and give a definition and an example of each	<p>Part-to-Part: Comparing two of the same whole. <i>The ratio of boys to girls in our class is 11 to 8</i></p> <p>Part-to-whole: Comparing a part of the whole to the whole. <i>The ratio of boys to students in our class is 12 to 27.</i></p> <p>2 different things: Comparing two different things that when combined do not make a whole, or one is not part of the other. <i>The sign in the hotel lobby says 1 dollar Canadian; 0.85 dollars U.S.</i></p>
What is my goal for this book, and how will I attain it?	

What's an example of two equivalent ratios?			
If you are given one ratio, how can you make an equivalent one and give an example?	$\frac{4}{11}$		
If you have two equivalent ratios and you are missing one number how can you find it, and what is it in the example?	Ex: $\frac{4}{20} = \frac{\quad}{100}$		
What is unit rate and how do you find it?			
How do you find population density?			
When can I get extra help for math?	Study hall, lunch, after school, before school. Make an appointment when possible.		
How can I get a better grade in math?	<table border="1"> <tr> <td> Participate in class!!! Do homework. Work with your group. Study for tests and quizzes. Ask questions. Come prepared for class. Do extra credit. </td> <td> <u>Come in after school</u> 1pt. Work quietly 2pts. Get help 3pts. Get & give help 4pts. Give help Pts. Go towards group work grade </td> </tr> </table>	Participate in class!!! Do homework. Work with your group. Study for tests and quizzes. Ask questions. Come prepared for class. Do extra credit.	<u>Come in after school</u> 1pt. Work quietly 2pts. Get help 3pts. Get & give help 4pts. Give help Pts. Go towards group work grade
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Who is the hardest working 7 th grade math student at Cedar Grove Belgium Middle School in Wisconsin? (<i>hint: you better put yourself</i>)			