

Mathematics Curriculum Planner

Course: 7th Grade Math
 School Week #: 13 - 15

Idea/Topic: Ratios and Proportions Time: 3 weeks

Basic Understandings:	The students will be able to:	TAKS & TEKS
	<ul style="list-style-type: none"> ▪ Use division to find unit rates ▪ Set up and solve proportions (cross-products) ▪ Solve application problems using proportions in areas such as speed, density, price, recipes, student-teacher ratios, scale drawings, unit conversions, etc. ▪ Find missing measures in similar figures. 	Objective 1: 7.1B, 7.2D Objective 2: 7.3A, 7.3B

Assessment Samples:

<p>2004 7th Grade TAKS #1 Emmanuel can run 100 meters in 20 seconds. If he competes in the 400-meter race, about how many seconds will it take him to run the race? A 5 sec B 4 sec C* 80 sec D 20 sec</p> <p>2004 7th Grade TAKS #10 Mr. Cohen used 25 kilograms of fertilizer on his lawn. The fertilizer contained 2 kilograms of nitrogen. Which equation can be used to find x, the percent of nitrogen in the fertilizer Mr. Cohen used? F $\frac{x}{100} = \frac{2}{25}$ G $\frac{x}{100} = \frac{25}{2}$ H $\frac{x}{2} = \frac{27}{100}$</p>	<p>2004 7th Grade TAKS #47 An athlete on the school football team can run 20 yards in 2.9 seconds. During the last football game, the athlete ran 64 yards for a touchdown. If the athlete's rate of speed remained the same, about how long did it take him to run for the touchdown? A* 9.3 sec B 21.3 sec C 58 sec D 19.2 sec</p>
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<p><u>Links to prior learning (pre-requisite skills):</u> Converting between fractions, decimals, and percents (Chapter 6, see 2.1B [Obj. 1])</p>	<p><u>Essential Vocabulary:</u> Ratio Cross products Proportion Estimation Part-to-whole Percent = out of 100 Unit rate Similar Corresponding</p>
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