

7th Grade Module 4 – Percent and Proportional Relationships

	4 - Mastery	3 - Proficient	2 - Basic	1 - Below Basic	0 - No Evidence
Topic A and B - 7.RP.3, 7.EE.3, 7.RP.1, 7.RP.2	<p>Meets all of the criteria in a Level 3</p> <p>Completes tasks including synthesis and evaluation</p>	<p>Use proportional relationships to solve multi-step real life problems with rational numbers, converting between forms when appropriate, and assess the reasonableness of answers</p> <p>Can write an equation that represents a proportional relationship by computing the unit rate.</p> <p>Can explain whether two quantities are proportional using a table (identifying the constant of proportionality) and a graph</p> <p>Can explain what all of the following points mean on a graph in terms of the situation: (x,y), $(0,0)$ and $(1,r)$</p>	<p>Use proportional relationships to solve problems in real world situations with rational numbers, converting between forms when appropriate.</p> <p>Can identify an equation that represents a proportional relationship by computing the unit rate.</p> <p>Can decide whether two quantities are proportional using a table and a graph</p> <p>Can explain what two of the following points mean on a graph in terms of the situation: (x,y), $(0,0)$ and $(1,r)$</p>	<p>Use proportional relationships to solve problems in real world situations with integer numbers</p> <p>Compute the unit rate.</p> <p>Can decide whether two quantities are proportional using a table or graph</p> <p>Can explain what one of the following points mean on a graph in terms of the situation: (x,y), $(0,0)$ and $(1,r)$</p>	<p>Shows no evidence of proficiency</p> <p>Little evidence of reasoning or application to solve the problem.</p>
Topic C – 7.RP.2b and 7.G.1	<p>Meets all of the criteria in a Level 3</p> <p>Completes tasks including synthesis and evaluation</p>	<p>Determine the scale factor from a problem and solve problems to compute length and area and reproduce a scale drawing using a different scale factor</p>	<p>Determine the scale factor from a problem and solve problems to compute length and area</p>	<p>Determine the scale factor from a problem and use it to solve problems to compute lengths</p>	<p>Shows no evidence of proficiency</p> <p>Little evidence of reasoning or application to solve the problem.</p>
Topic D – 7.RP.2c, 7.RP.3, 7.EE.3	<p>Meets all of the criteria in a Level 3</p> <p>Completes tasks including synthesis and evaluation</p>	<p>Can write an equation that represents a proportional relationship</p> <p>Use proportional relationships to solve multi-step real life problems with rational numbers, converting between forms when appropriate, and assess the reasonableness of answers</p>	<p>Can identify an equation that represents a proportional relationship</p> <p>Use proportional relationships to solve problems in real world situations with rational numbers, converting between forms when appropriate.</p>	<p>Use proportional relationships to solve problems in real world situations with integer numbers</p>	<p>Shows no evidence of proficiency</p> <p>Little evidence of reasoning or application to solve the problem.</p>

7.EE.B.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies.

7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.

7.RP.2 Recognize and represent proportional relationships between quantities.

- a) Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin
- b) Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.
- c) Represent proportional relationships by equations
- d) Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.

7.RP.3 Use proportional relationships to solve multi-step ratio and percent problems.

7.G.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.