

# “Unwrapping” the Standards

1. Choose a course priority standard for the “unwrapping process”.
2. Skills: Circle the verbs – what *students* need to do.
3. Concepts: Underline nouns and noun phrases that represent *teachable concepts*.
4. Compose Big Idea statements

**Content Area: Math**

**Grade Level: 7<sup>th</sup>**

**Standard: 7.EE.3**

<p><b>Domain:</b> Expressions and Equations (EE)</p> <p><b>Cluster:</b> Solve real-life and mathematical problems using numerical and algebraic expressions and equations</p> <p><b>Standard: 7.EE.3</b> - 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. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 ¾ inches long in the center of a door that is 27 ½ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used for and exact computation. (DOK 1,2,3)</i></p>		
1. Skills (verbs)	2. Key Concepts (nouns)	3. Additional Clarifications / Examples
Students need to be able to do.....	Students need to know.....	
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.	<p><u>Example:</u> Three students conduct the same survey about the number of hours people sleep at night. The results of the number of people who sleep 8 hours at night are shown below. In which person’s survey, did the most people sleep 8 hours?</p> <ul style="list-style-type: none"> <li>• Susan reported that 18 of 48 people she surveyed get 8 hours sleep at night.</li> <li>• Kenneth reported that 36% of the people he surveyed get 8 hours of sleep at night.</li> <li>• Jamal reported that 0.365 of the people he surveyed get 8 hours of sleep at night.</li> </ul> <p><u>Example:</u> A rectangle has a length of 4 ½ cm and a perimeter of 27 cm. What is the width?</p> $27 = 2(4 \frac{1}{2}) + 2w$ $9 = w$
Apply	Properties of operations	
Calculate	With numbers in any form	
Convert	Between forms as appropriate	
Assess	Reasonableness of answers using mental computation and estimations strategies	

		<p><u>Example:</u> Madison earns \$22.50 a week delivering newspapers. She wants to purchase a laptop that costs \$999. If she saves all her earnings for an entire year, will she have enough to purchase the laptop?</p> <p>YES – Since there are 52 weeks in a year and she makes \$22.50 a week, we can estimate her total earnings at: <math>\\$20 \times 50 = \\$1000 &lt; \\$22.50 \times 52</math> So we can conclude that she will make over the amount needed to buy the laptop at the end of a year.</p>
<p><b>4. Big Idea(s) in student language:</b> Students will estimate and solve real-world problems using whole numbers, fractions, and decimals with multiple algebraic or numerical representations.</p>		