Lesson 15: Length Measurements

- Let's solve problems about distances and lengths.

Warm-up: Which One Doesn't Belong: Measurements

Which one doesn't belong?

   A. 3 feet

   B. (3×1) yards

   C. (2×18) inches

   D. $\left(\frac{1}{3} + \frac{1}{3} + \frac{1}{3} \right)$ yard

15.1: Frisbee Throws

Six students were throwing frisbees on field day. Here is some information about each person's first throw.

student	distance
Han	17 yards
Lin	$51\frac{1}{2}$ feet
Clare	$21\frac{1}{3}$ feet
Andre	22 yards 2 feet
Elena	
Tyler	

- Elena's frisbee went 3 times as far as Clare's did.

- Andre's frisbee went 4 times as far as Tyler's did.

1. Complete the table with Elena and Tyler's distances. Explain or show your reasoning.

2. Who are the top 3 throwers for that round?

   Find out by listing the students and their distances in feet and in order, from longest to shortest.

rank	student	distance (feet)
1		
2		
3		
4		
5		
6		

15.2: Stone Towers

While on an outing, a group of friends had a stone-stacking contest to see who could build the tallest stone tower.

- Andre's stone tower is 3 times as tall as Diego's, but Diego didn't build the shortest tower.

- The tallest tower is 4 feet and 2 inches tall and belongs to Tyler.

- One person built a tower that is 39 inches tall.

- Tyler's tower is 5 times as tall as the shortest tower.

1. How tall is each person's stone tower? Be prepared to explain or show your reasoning.

person	tower height (inches)
Andre	
Tyler	
Clare	
Diego	

2. Elena came along and built a tower that is 5 times as tall as Diego's tower. Is Elena's tower more than 6 feet? Show your reasoning.