Length Measurements

Let's solve problems about distances and lengths.

Warm-up

Which Three Go Together: Measurements

Which 3 go together?

A

3 feet

B

(3×1) yards

C

(2×18) inches

D

$(\frac{1}{3} + \frac{1}{3} + \frac{1}{3})$ yard

Disc Throws

There are 6 students throwing discs 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 disc went 3 times as far as Clare's disc.

- Andre's disc went 4 times as far as Tyler's disc.

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 ordering the students and their distances from longest to shortest.

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

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 tower is 3 times as tall as Diego's, but Diego didn't build the shortest tower.
- Tyler built the tallest tower at 4 feet and 2 inches.
- 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?

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.