## 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?

1. 3 feet
2. yards
3. inches
4. 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 | feet |
| Clare | 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 |  |

1. 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.



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