## Lesson 16: Estimating Population Proportions Cool Down: More than 48 Grams

A chemical engineer is trying to increase the amount of the useful product in a reaction. She performs the reaction with her new equipment 10 times and gets the following amounts of the useful product in grams:
$\begin{array}{llllllllll}47.1 & 48.2 & 48.3 & 47.5 & 48.5 & 48.1 & 47.2 & 48.2 & 48.4 & 48.3\end{array}$

1. What proportion of the reactions were above the 48 grams threshold?
2. Other chemists typically get $65 \%$ of their reactions to produce more than 48 grams.

Should the engineer say that she was able to increase the useful product when compared to the other chemists?

