

**April 24, 2012** <sup>M7H</sup>  
**Anything to correct?**



## 4/24 - Samples and Populations

Population:

a group of people

"everyone you know"

Sample:

a portion of the population

"people you know at school"

What is your favorite color?

Pink	
Green	
Blue	
Yellow	
Purple	
Orange	
Red	
Other	

Is this a good prediction of the entire student body?

not really

What could improve it?

random sample  
balanced M F  
bigger sample

**"A recent survey shows that 3 out of 4 people prefer snowboarding over skiing."**

Is this a good prediction of the kids at school?

No

What could make it better?

larger sample

A survey asked 48 randomly chosen students if they played in the school band. Six students said "yes." If there are 80 students in the band, use this to predict the number of students in the school.

$$\begin{array}{c} \frac{6}{48} = \frac{80}{n} \\ \text{Sample} \quad \text{population} \end{array}$$
$$\frac{6n}{6} = \frac{3840}{6}$$
$$n = 640$$

# Homework

Red workbook – page 204, 204A

**Due** Wednesday