

• Example 2: Egg carton
Suppose the ratio of white to brown eggs is 1:2,
Does this mean you will have $\frac{1}{2}$ of each?
using a visual...

What fraction of the eggs is brown? And white?

Ratios and Fractions are two different concepts!

Equivalent ratios
A:B and C:D are equivalent iff they have **the same value**
What are the consequences of this?

A **proportional relationship** is a collection of pairs of numbers that are in equivalent ratios.

A **proportion** is an equation stating that two ratios are equivalent.

• Example: Orangey Juice

How can oraginess be quantified?

- Keep ratio same
- Use a proportion!

If we wanted to prepare juice with the same oranginess as Pitcher A but using 5 cans of orange concentrate, how much water should we use?

Pitcher A → orange to water 1:3 or $\frac{1}{3}$

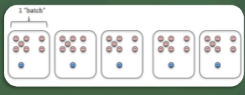
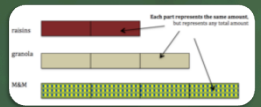
We need same value! How do we find that?
Use a proportion!
Try it...

Ratio: Two Perspectives

A COMPOSED UNIT/BATCH	FIXED NUMBERS OF PARTS
Two quantities are in a ratio of A to B if for every A units present of the first quantity there are B units present of the second quantity.	Two quantities are in a ratio of A to B if we divide the first quantity into A equal parts, then the second quantity consist of B equal parts of the same size.
<i>Example: For every 7 female project participants in this room there is 1 male project participant.</i>	<i>Example: Alvaro's favorite trail mix requires 1 parts of raisins, 4 parts granola, and 5 parts of M&M peanuts a bag/bowl.</i>

Ratio: Two Perspectives

A COMPOSED UNIT/BATCH	FIXED NUMBERS OF PARTS
<i>Example: For every 7 female project participants in this room there is 1 male project participant.</i>	<i>Example: Alvaro's favorite trail mix requires 2 parts of raisins, 4 parts granola, and 5 parts of M&M peanuts in each bowl.</i>

- Time to Take Stock
- What did we learn today?
- More specific
 - Take away about ratios, fractions, and proportions
 - Important definitions/ideas/results
 - Take away from different ways to represent the solutions
- Questions you still have

