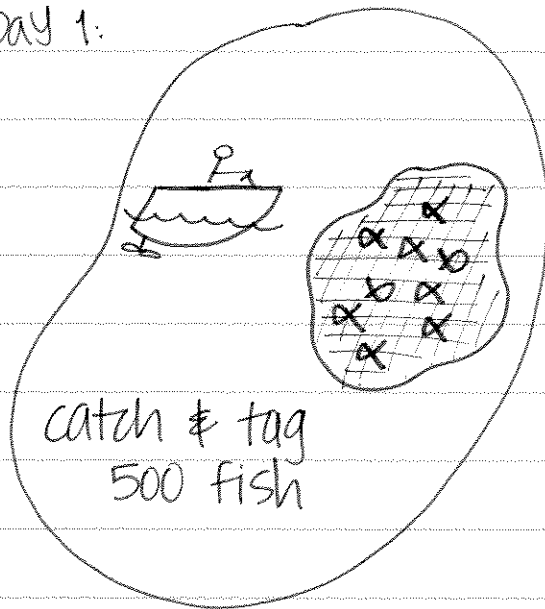


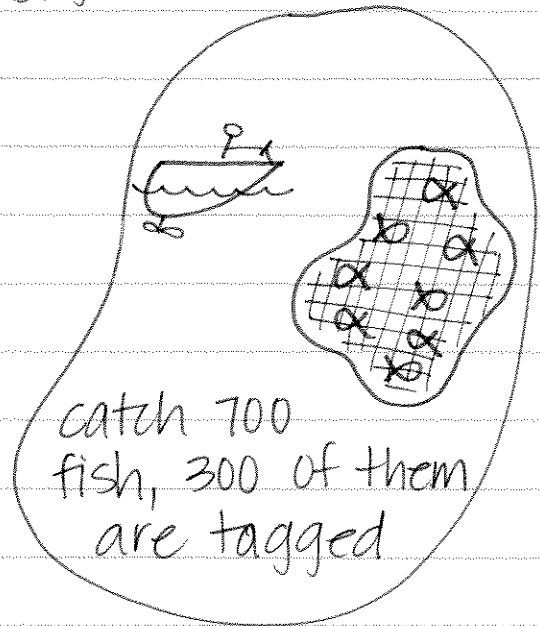
APPLICATIONS of PROPORTIONS

EXAMPLE: counting the number of fish in a lake:

Day 1:



Day 30:



Let x represent the total number of fish in the lake.

The ratio of total fish to tagged fish is:

$$\text{Day 1: } \frac{\text{total}}{\text{tagged}}$$

$$\text{Day 30: } \frac{\text{total}}{\text{tagged}}$$

The two ratios should be _____

$$\frac{x}{500} = \frac{700}{300}$$

Solve for x.

Therefore, there are about _____
fish in the lake.

↳ example 1: A car travels 60 miles per
hour. How many miles will the car
travel in 7 hours?

Note: When solving proportions, make sure the
units are the same.

↳

example 2:

On a map, 1 inch represents 72 kilometers. If the distance between two cities on the map is 4.5 inches, how many kilometers apart are they?

APPLICATIONS of PROPORTIONS Practice Problems

1. A recipe calls for 5 cups of sugar for 30 servings. How many cups of sugar are needed to make 8 servings?

2. At the bookstore you can buy 7 books for 10 dollars. How many books can you buy for 24 dollars?

Remember: you cannot buy a PORTION of a book so be sure to ROUND DOWN to the nearest whole number.