2.3 Percent problems

Chris Huson

3 October 2022

2.3 Percentages

Learning Target: I can solve problems with percentages Monday 3 October

Do Now: Complete Jumprope survey in Google Classroom

Lesson

- ► Three methods for ratio problems (review)
- ► 2.3 Percentages Khan Academy video
- ► Homework: View remaining Khan videos on percentages, practice problems

Ratio and proportion example

A fish farmer stocks her fish tanks with a ratio of 5 talapia to 3 trout. If she puts 300 talapia into the tanks, how many trout should she add?

▶ Model the problem 3 ways: a table, a proportion, and a ratio calculation with units

Ratio and proportion example

A fish farmer stocks her fish tanks with a ratio of 5 talapia to 3 trout. If she puts 300 talapia into the tanks, how many trout should she add?

▶ Model the problem 3 ways: a table, a proportion, and a ratio calculation with units

talapia	trout
5	3
300	?

▶

Ratio and proportion example

A fish farmer stocks her fish tanks with a ratio of 5 talapia to 3 trout. If she puts 300 talapia into the tanks, how many trout should she add?

▶ Model the problem 3 ways: a table, a proportion, and a ratio calculation with units

talapia	trout
5	3
300	?

▶
▶ $\dfrac{5 \text{ talapia}}{3 \text{ trout}} = \dfrac{300 \text{ talapia}}{x \text{ trout}}$

Ratio and proportion example

A fish farmer stocks her fish tanks with a ratio of 5 talapia to 3 trout. If she puts 300 talapia into the tanks, how many trout should she add?

▶ Model the problem 3 ways: a table, a proportion, and a ratio calculation with units

talapia	trout
5	3
300	?

▶

▶ $\dfrac{5 \text{ talapia}}{3 \text{ trout}} = \dfrac{300 \text{ talapia}}{x \text{ trout}}$

▶

$$300 \text{ talapia} \times \frac{3 \text{ trout}}{5 \text{ talapia}} =$$

Ratio and proportion example 2

Jack was planting a tree. He was to dig a hole that was 3 feet deep for every 5 feet of tree height. How deep should he dig the hole for a tree that is 17 feet high?

Model the problem 3 ways: a table, a proportion, and a ratio calculation with units

Ratio and proportion example 3

A meteorologist reports that the ratio of snowfall in January to total snowfall during the average winter is 2 to 5. If 34 inches have fallen in January of the current year, find the predicted total snowfall for the entire winter.

Model the problem in the most efficient way of your choice.