

In this 18-lesson module, students deepen their understanding of ratios and proportional relationships as they explore a variety of percent problems. They convert between fractions, decimals, and percents to further develop a conceptual understanding of percent and use algebraic expressions, equations and other models such as tape diagrams as tnms as tnm

What is the whole unit in each scenario?

The number or quantity that another number or quantity is called the .

Solution:

Part of a Whole as a Percent

Brad put crickets in his pet lizard's cage. After one day, Brad's lizard had eaten % of the crickets he had put in the cage. By the end of the next day, the lizard had eaten % of the remaining crickets. How many crickets were left in the cage at the end of the second day?

Solution:

Day 1:
 $n = 0.25(10)$
 $n = 2.5$ *At the end of the first day, Brad's lizard had eaten 25% of the crickets.

Day 2:
 $n = 0.75(10 - 2.5)$
 $n = 5.625$ *At the end of the second day, Brad's lizard had eaten 75% of the remaining crickets.

Cricket

Consider this: If you tried this problem and got an answer of 6 1/2 crickets, does your answer make sense? Explain.

Create a scale drawing of the picture to the right using a scale factor of %.

Write three equations that show how you determined the lengths of three different parts of the resulting picture.

Picture

Solution:

For a review of scale drawings, refer to Module 1 topic D.