Name_____ Class_____ Date_____

3-1

Solving Problems with Expressions, Equations, and Inequalities

COMMON CORE

Essential question: *How can you solve problems by using expressions, equations, and inequalities?*

CC.7.EE.3

1   EXPLORE   Solving Problems Using Expressions

At the beginning of the year, a stock was worth $41. By the end of the year, its value had increased 18.9%.

A   Estimate the value of the stock at the end of the year. Use a bar model.

Round 41 to __40__ and 18.9 to 20. As a fraction, 20% is written as _____.

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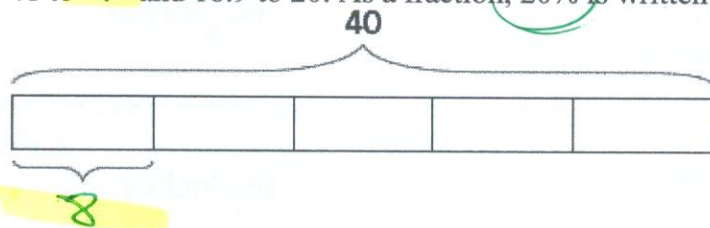
The white bar represents $40. It is divided into __5__ equal pieces.

Each section represents __8__, or $ __8__.

The value of the stock increases by an amount represented by 1 section of the model, so add 1 section to the end of the bar to find the stock's end-of-year value.

$40 + $ __×8 ×6__
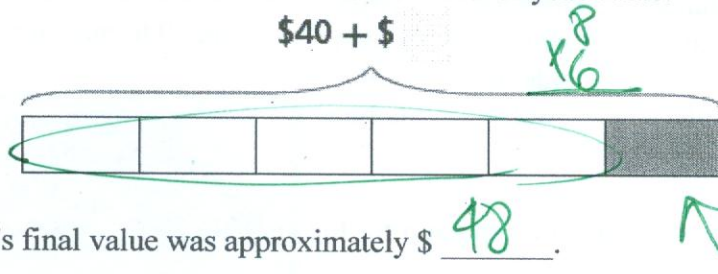
So the stock's final value was approximately $ __48__.

B   Find the final value of the stock to the nearest hundredth.

Convert 18.9% to a decimal.   18.9% = __0.189__

Write an expression for the stock's final value.

__41__ + 0.189(__4__)
Initial value   18.9% of Initial value

41 + 0.189(41) = __48.75__

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