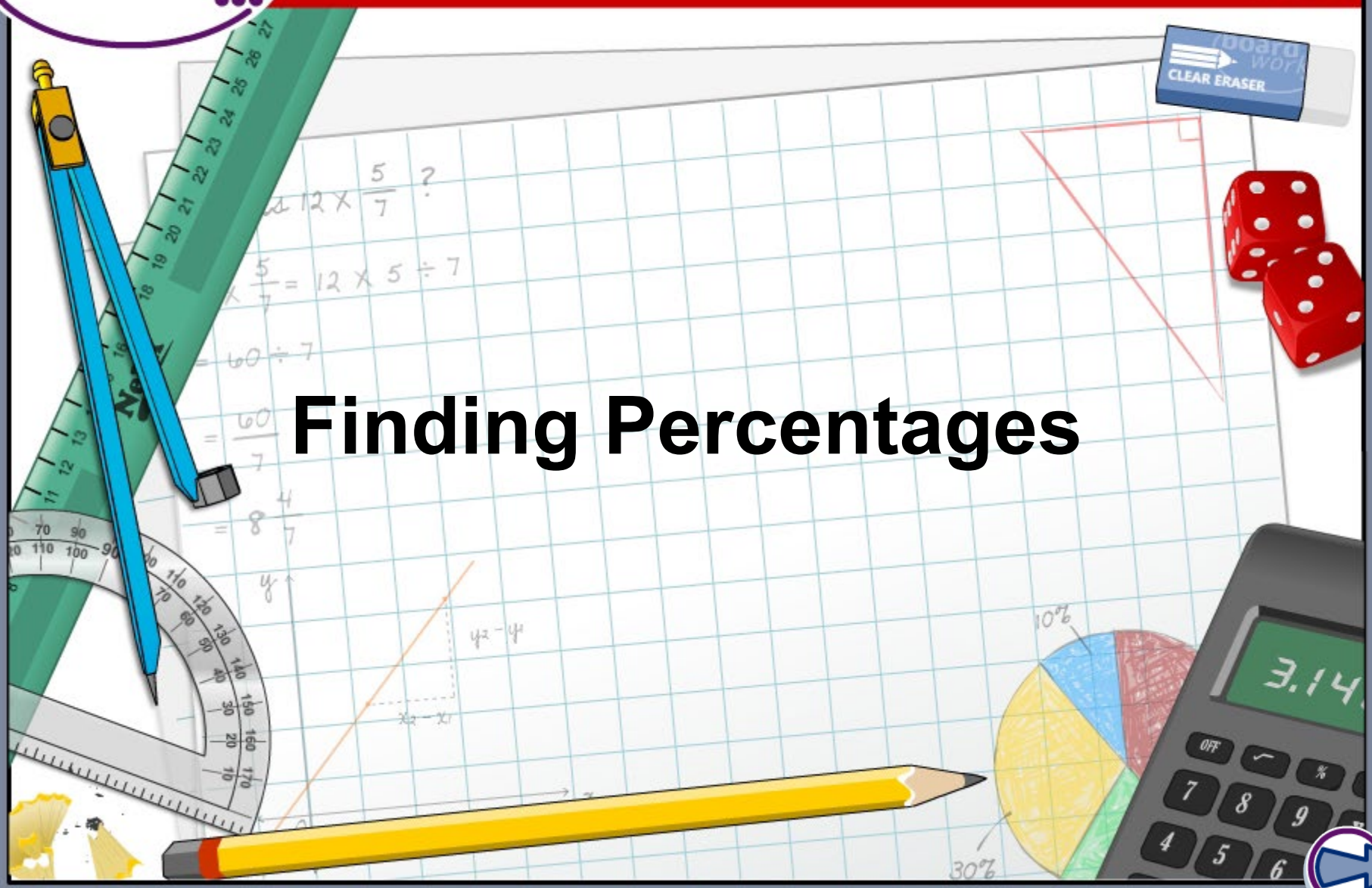


Finding Percentages

Information

Common core icons

This icon indicates a slide where the Standards for Mathematical Practice are being developed. Details of these are given in the Notes field.

Slides containing examples of mathematical modeling are marked with this stamp.

This icon indicates an opportunity for discussion or group work.

The **Standards for Mathematical Practice** outlined in the Common Core State Standards for Mathematics describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

These are:

1) Make sense of problems and persevere in solving them.

2) Reason abstractly and quantitatively.

3) Construct viable arguments and critique the reasoning of others.

4) Model with mathematics.

5) Use appropriate tools strategically.

6) Attend to precision.

7) Look for and make use of structure.

8) Look for and express regularity in repeated reasoning.

This icon indicates that the slide contains activities created in Flash. These activities are not editable.

This icon indicates teacher's notes in the Notes field.

Familiar percentages

Where have you seen percentages used in your daily life?

“Percent”

What does “percent” mean?

Think of other words that include “cent.”

There are 100 cents in one dollar.

There are 100 years in one century.

“Percent” means “out of 100.”

Percentage as rate

We can think of percentages as a rate per 100. For example:

$$46\% = \frac{46}{100} \qquad 180\% = \frac{180}{100} \qquad 7.5\% = \frac{7.5}{100}$$

20% of 80 means **"20 hundredths of 80"**

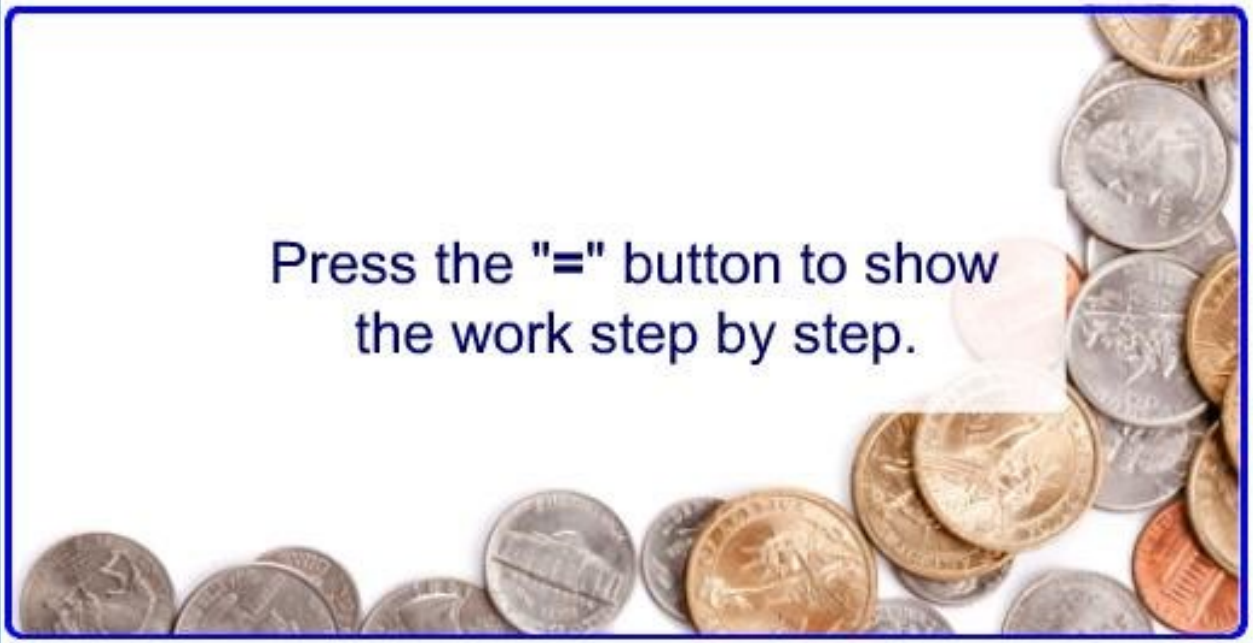
$$\frac{20}{100} \times 80 = \frac{\cancel{20}^{2} \times \cancel{80}^{8}}{\cancel{100}_{\cancel{10}_{1}}}$$

$$= \frac{16}{1}$$

$$= 16$$

Using percentages

Q1/5 Miguel gets $9 allowance each week. He wants to save 4% of this. How much money will he save each week?



42¢

36¢

4¢

Percentages diagram

Press on the yellow boxes and calculate the percentages of the central amount.