Name Date Period

Activity 102
Chapter 9, Lesson 3

Finding the Percent One Number Is of Another

EXAMPLE What percent of 35 is 7?

Step 1 Write a fraction with the number following "of" as a denominator. $\frac{7}{35}$

Step 2 Simplify the fraction. $\frac{7}{35} = \frac{1}{5}$

Step 3 Rename the fraction as a percent. $\frac{1}{5} = 5\overline{)1.00}$ $\frac{0.20}{}$ $= 20\%$

Answer: 7 is 20% of 35.

you can skip step 2, just divide 7 by 35

EXAMPLE 10 is what percent of 80?

$\frac{10}{80}$

$\frac{10}{80} = \frac{1}{8}$

$\frac{1}{8} = 8\overline{)1.00}$ $\frac{0.125}{}$ $= 12.5\%$

10 is 12.5% of 80.

Directions Find the percents.

1. What percent of 100 is 5? _____

2. 10 is what percent of 25? _____

3. What percent of 60 is 15? _____

4. 6 is what percent of 18? _____

5. 6 is what percent of 30? _____

6. 12 is what percent of 16? _____

7. 18 is what percent of 36? _____

8. 163 is what percent of 326? _____

9. 25 is what percent of 50? _____

10. What percent of 12 is 9? _____

11. 16 is what percent of 64? _____

12. What percent of 100 is 57? _____

13. 12 is what percent of 96? _____

14. What percent of 1,000 is 50? _____

15. What percent of 300 is 60? _____

16. 16 is what percent of 100? _____

17. What percent of 80 is 48? _____

18. 1 is what percent of 7? _____

19. What percent of 16 is 16? _____

20. 10 is what percent of 90? _____

Using Circle Graphs

EXAMPLE Nancy's investment budget provides for a $500 savings, $300 in stocks, and $100 in bonds. Draw a circle graph to show the percent budgeted in each category.

Step 1 Find the total amount of his budget.

$$\begin{array}{r} \$500 \\ 300 \\ +\ 100 \\ \hline \$900 \end{array}$$

Step 2 Find the percent in each category

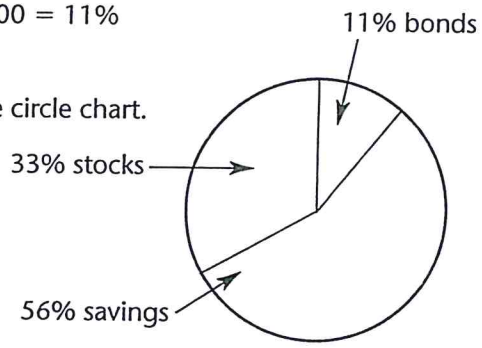
$500 \div 900 = 56\%$
$300 \div 900 = 33\%$
$100 \div 900 = 11\%$

Step 3 Find the degrees for each category

$56\% \times 360 = 202°$
$33\% \times 360 = 119°$
$11\% \times 360 = 40°$

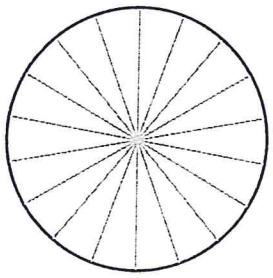
Check that the degrees total 360. Some error may occur due to rounding.

Step 4 Draw the circle chart.



Directions Draw a circle graph for each problem. Each chart is marked in 20 degree sections. Draw in your own lines to show your answers.

1. Billy Joe's monthly housing budget covers 75% rent, 10% new furnishings, 5% decorating and 10% repairs. Draw a circle graph to show the percent budgeted in each category.



2. Pilantana's clothing budget includes $135 for new clothes, $45 for dry cleaning, $90 for accessories. Draw a circle graph to show how much is budgeted for each category.