


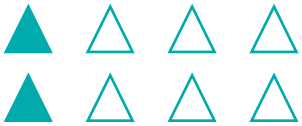




Introducing Percents

NCTM Standards 1, 6, 7, 8, 9

Complete the following to match each picture.

<p>Example</p> <div style="text-align: center;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">$\frac{1}{2}$</div> <div style="text-align: center;">$\frac{50}{100}$</div> <div style="text-align: center;">50%</div> </div>	<p>1</p> <div style="text-align: center;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">$\frac{3}{4}$</div> <div style="text-align: center;"> $\frac{\square}{100}$ </div> <div style="text-align: center;">_____ %</div> </div>
<p>2</p> <div style="text-align: center;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> $\frac{\square}{\square}$ </div> <div style="text-align: center;"> $\frac{20}{100}$ </div> <div style="text-align: center;">_____ %</div> </div>	<p>3</p> <div style="text-align: center;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> $\frac{\square}{\square}$ </div> <div style="text-align: center;"> $\frac{\square}{100}$ </div> <div style="text-align: center;">_____ %</div> </div>
<p>4</p> <div style="text-align: center;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> $\frac{\square}{\square}$ </div> <div style="text-align: center;"> $\frac{\square}{100}$ </div> <div style="text-align: center;">_____ %</div> </div>	<p>5</p> <div style="text-align: center;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> $\frac{\square}{\square}$ </div> <div style="text-align: center;"> $\frac{\square}{100}$ </div> <div style="text-align: center;">_____ %</div> </div>

Solve the problems.

- 6** Alex got 90 out of 100 correct answers on a quiz.
What percent of the answers were correct? _____
- 7** Linh spelled 45 out of 50 words correctly on a spelling test.
What percent of the words were spelled correctly? _____
- 8** Nancy got $\frac{3}{4}$ of the answers correct on a science paper.
What percent of her answers were correct? _____
- 9** Chris got 82% of the words correct on a big spelling test.
There were 50 words on the test. How many did Chris get right? _____
- 10** Patrick got 86% of the answer correct on a social studies quiz.
There were 50 questions. How many did he get wrong? _____

Complete each box so that expressions in each group have the same value.

11 $\frac{25}{100}$ $\frac{1}{\square}$ 0.
 _____% $\frac{\square}{8}$ $\frac{5}{\square}$

12 0. $\frac{\square}{2}$ $\frac{15}{\square}$
 $\frac{\square}{100}$ _____% 0.

13 $\frac{1}{5}$ $\frac{\square}{10}$ $\frac{\square}{100}$
 _____% 0. $\frac{3}{\square}$

14 _____% $\frac{\square}{4}$ $\frac{30}{\square}$
 $\frac{\square}{100}$ 0. $\frac{12}{\square}$

Use these figures to draw other figures.

15 If this square is 25% of a figure, draw a figure that could be 100%.



16 If this rectangle is 75% of a figure, draw a figure that could be 100%.



17 If this triangle is 50% of a figure, draw a figure that could be 150% of the figure.



18 If this trapezoid is 20% of a figure, draw a figure that could be 80% of the figure.



19 **Challenge** If this square is 75% of a figure, draw a figure that could be 100% of the figure. Tell how you know.

