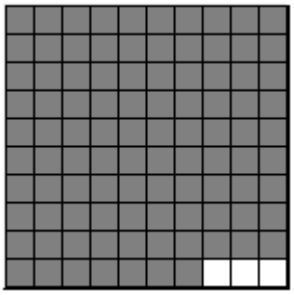
GHCI/MFM1P

Name: _____
Date: _____

Percents

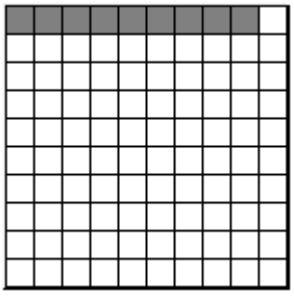
What fraction of each grid is shaded?

Grid 1



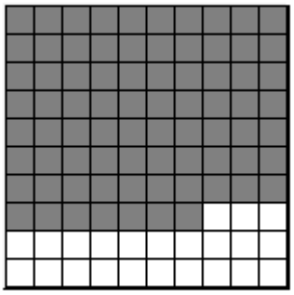
Answer :

Grid 2



Answer :

Grid 3



Answer :

Each grid above has 100 boxes.

For each grid, the ratio of the number of shaded boxes to the total number of boxes can be represented as a fraction.

Shaded Boxes to Total Boxes

Grid	Ratio	Fraction
1		
2		
3		

We can represent each of these fractions as a percent using the symbol %.

$\frac{97}{100}$ **= 97%** $\frac{9}{100}$ **= 9%** $\frac{77}{100}$ **= 77%**

Definition: **A percent is a ratio whose second term is 100. Percent means parts per hundred. The word percent comes from the Latin phrase *per centum*, which means per hundred. In mathematics, we use the symbol % for percent.**

**** Percents are fractions with 100 as the denominator****

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Let's look at our comparison table again. This time the table includes percents.

Comparing Shaded Boxes to Total Boxes			
Grid	**Ratio**	**Fraction**	**Percent**
1	97 to 100		
2	9 to 100		
3	77 to 100		

Practice:

1. Write each percent as a fraction in lowest terms.

From percent To fraction: Divide by 100; then reduce the fraction

(a) 37% (b) 40% (c) $\frac{3}{4}\%$ (d) $3\frac{1}{2}\%$

2. Write each percent as a decimal.

From percent To decimal: Divide by 100 using the calculator

(a) 24% (b) 3% (c) 125% (d) 0.25%

3. Write each fraction as a percent.

From fraction To percent: Multiply by 100

(a) $\frac{23}{100}$ (b) $\frac{3}{50}$ (c) $\frac{3}{8}$ (d) 2

4. Write each decimal as a percent

From decimal To percent: Multiply by 100

(a) 0.25 (b) 0.125 (c) 2.45 (d) 0.008

Answers: **1.** (a) $\frac{37}{100}$, (b) $\frac{2}{5}$, (c) $\frac{3}{400}$, (d) $\frac{7}{200}$**;** **2.** (a) 0.24, (b) 0.03, (c) 1.25, (d) 0.0025**;**
3. (a) 23%, (b) 6%, (c) 37.5%, (d) 200%**;** **4.** (a) 25%, (b) 12.5%, (c) 245%, (d) 0.8%