

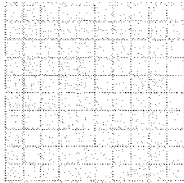
6.1 Representing Percents

Percent means out of 100 (hundredths)

Therefore, $100\% = \frac{100}{100} = \boxed{1}$

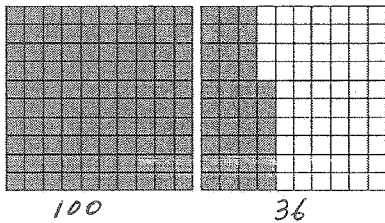
How can you represent percents on a grid?

a) The hundred grid shows 100%. How many squares are shaded?



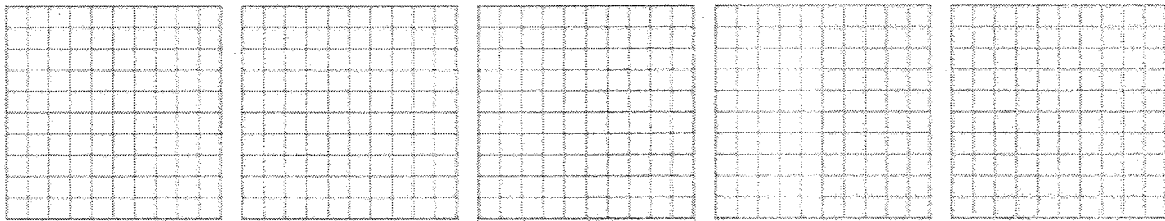
100 squares are shaded.

b) Explain how the following diagram shows 136%.

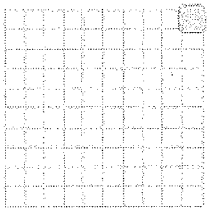


$$100 + 36 = 136\%$$

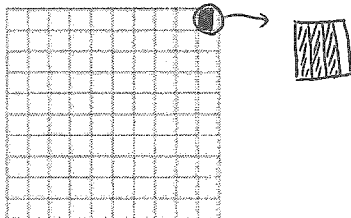
c) Shaded hundred grids to show 350%. How many squares did you shade?



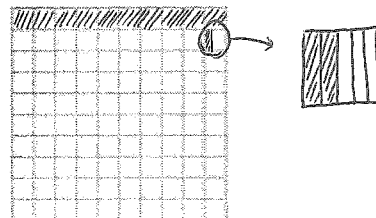
The circled square represents 1% on the hundred grid shown.



a) How would you represent $\frac{3}{4}\%$?

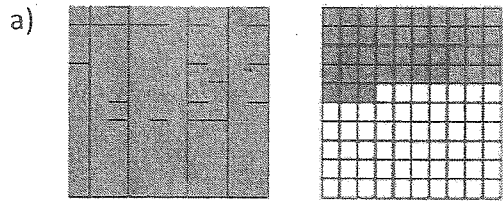


b) How would you represent 10.4%?

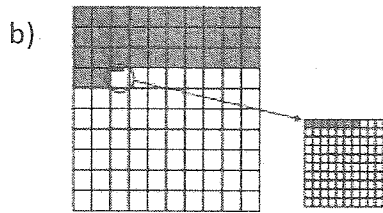


$$10.4 = 10 + 0.4 = 10 + \frac{4}{10} = 10 + \frac{2}{5}$$

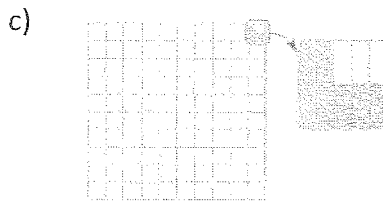
One completely shaded grid represents 100%. What percent does each diagram represent?



$$100 + 43 = \boxed{143\%}$$



$$32 + \frac{7}{100} = \boxed{32\frac{7}{100}\% \text{ or } 32.07\%}$$



$$\frac{7}{10}\% \text{ or } 0.7\%$$

Assignment part 1: p128 #4, 5, 8, 13, 14, 16

Fractions, Decimals and Percents

All percents can be written as a fraction or a decimal

a) Convert to a decimal and a percent:

$\frac{2}{5}$ decimal: $2 \div 5 = \boxed{0.4}$

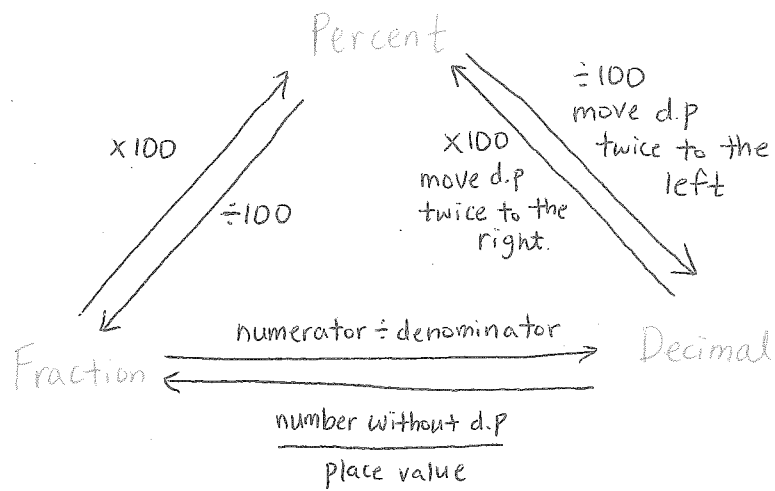
$$\begin{array}{r} 0.4 \\ 5 \overline{)20} \\ \underline{-20} \\ 0 \end{array}$$

percent: $\frac{2}{5} \times \frac{100}{1} = \boxed{40\%}$

b) Convert the following decimals to a percent and a fraction:

0.36 percent: $0.36 \times 100 = \boxed{36\%}$ fraction: $\frac{36}{100} = \boxed{\frac{9}{25}}$

4.75 percent: $4.75 \times 100 = \boxed{475\%}$ fraction: $4\frac{75}{100} = \boxed{4\frac{3}{4}}$



Percent	Fraction	Decimal
62.5%	$\frac{5}{8}$	0.625
94%	$\frac{47}{50}$	0.94
0.2%	$\frac{1}{500}$	0.002
$66\frac{2}{3}\%$	$\frac{2}{3}$	$0.\overline{6}$
450%	$4\frac{1}{2}$	4.5
300%	3	3
$32\frac{1}{2}\%$	$\frac{13}{40}$	0.325
$33.\overline{3}\%$	$\frac{1}{3}$	0.33333...
$\frac{1}{4}\%$	$\frac{1}{400}$	0.0025
406.5%	$4\frac{13}{200}$	4.065
$46\frac{2}{3}\%$	$\frac{7}{15}$	$0.4\overline{6}$

Assignment part 2: Conversion worksheet