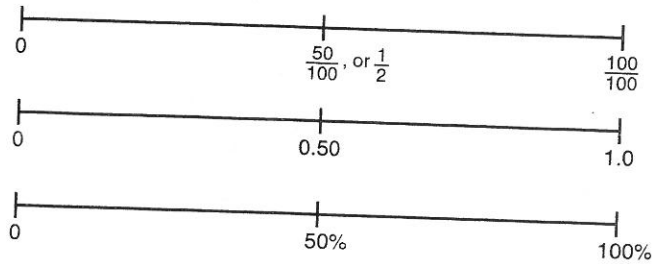


► To write a fraction as a percent, write the equivalent fraction with denominator 100.

For example:

$$\frac{1}{2} = \frac{50}{100} = 50\%$$



**Example**

a) Write each percent as a fraction and as a decimal.

- i) 75%                      ii) 9%

b) Write each fraction as a percent and as a decimal.

- i)  $\frac{2}{5}$                       ii)  $\frac{7}{20}$

Draw number lines to show how the numbers are related.

**A Solution**

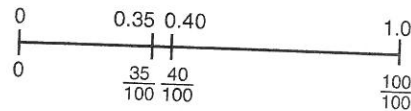
a) i)  $75\% = \frac{75}{100} = 0.75$



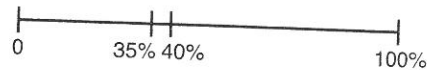
ii)  $9\% = \frac{9}{100} = 0.09$



b) i)  $\frac{2}{5} = \frac{40}{100} = 40\% = 0.40$

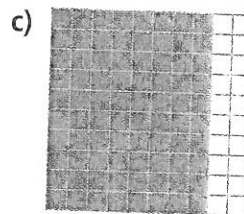
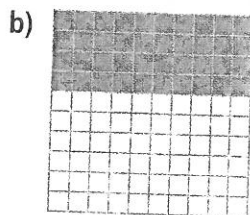
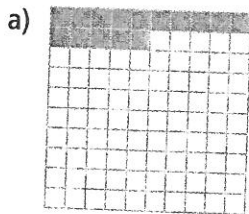


ii)  $\frac{7}{20} = \frac{35}{100} = 35\% = 0.35$



**Practice**

1. What percent of each hundred chart is shaded? Write each percent as a fraction and as a decimal.



2. Write each percent as a fraction and a decimal.  
Sketch number lines to show how the numbers are related.

a) 2%      b) 9%      c) 28%      d) 95%

3. Write each fraction as a decimal and a percent.

a)  $\frac{2}{10}$       b)  $\frac{3}{50}$       c)  $\frac{4}{25}$       d)  $\frac{13}{20}$       e)  $\frac{4}{5}$

4. Fred had 8 out of 10 on a test. Janet had 82% on the test.  
Who did better? How do you know?



5. **Assessment Focus** You will need a sheet of paper and coloured pencils.

- Divide the paper into these 4 sections.
  - 1 blue section that is  $\frac{1}{2}$  of the page
  - 1 red section that is 10% of the page
  - 1 yellow section that is 25% of the page
  - 1 green section to fill the remaining space.

Explain how you did this.

What percent of the page is the green section?

How do you know?

6. **Take It Further** Suppose each pattern is continued on a hundred chart.

The numbers in each pattern are coloured red.

For each pattern, what percent of the numbers on the chart are red?

Explain your strategy for each pattern.

a) 4, 8, 12, 16, 20, ...      b) 1, 3, 5, 7, ...      c) 2, 4, 8, 16, ...      d) 1, 3, 7, 13, ...

## Reflect

Suppose you know your mark out of 20 on an English test.

Tell how you could write the mark as a decimal and a percent.