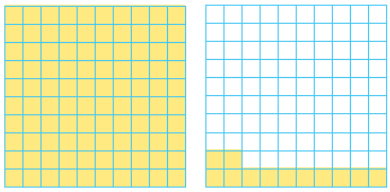
Practise

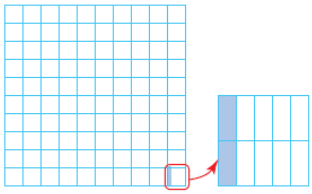
For help with #4 and #5, refer to Example 1 on pages 124–125.

4. One full grid represents 100%. What percent does each diagram represent?

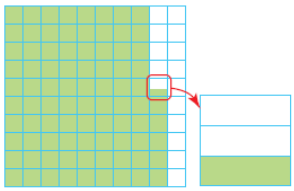
a)



b)

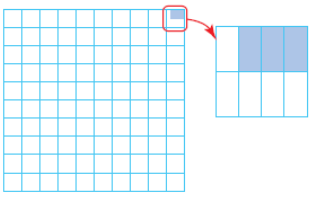


c)

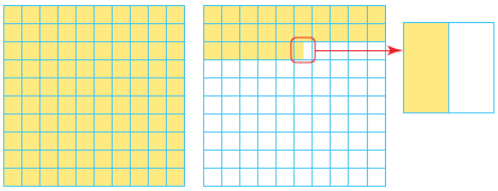


5. What percent is represented by each diagram if a completely shaded grid represents 100%?

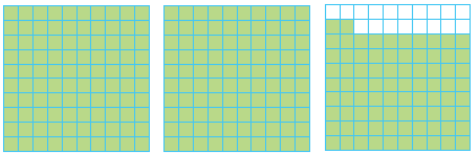
a)



b)



c)



For help with #6 and #7, refer to Example 2 on page 126.

6. Represent each percent on a grid.

a) 125% **b)** $10\frac{1}{2}\%$ **c)** 0.4%

d) 262% **e)** $\frac{7}{8}\%$ **f)** 45.6%

7. Represent the percent in each statement on a grid.

a) Attendance at the fall fair increased by 3.2% this year.

b) The average mass of a Singapura cat is about 0.13% of the mass of a Siberian tiger.

c) The length of the Yukon River is about 230% of the length of the Fraser River.

8. How many hundred grids are needed to show each of the following percents?

a) 300% **b)** 466% **c)** 1200%

Apply

9. Give two examples where a percent greater than 100% might be found in everyday life.

10. Why might a scientist studying water pollution work with percents less than one?

13. a) Use a calculator to convert $\frac{1}{3}$ to a decimal. How could $\frac{1}{3}\%$ be shown using a hundred grid?

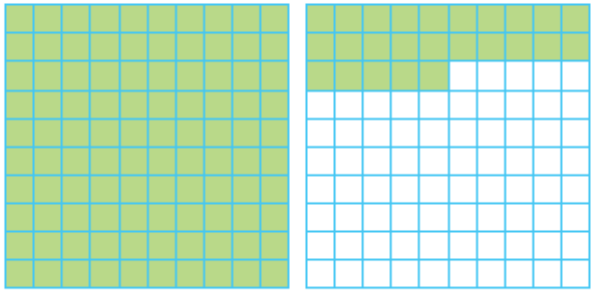
Page 128 # 4, 5, 6, 7, 8, 9, 10, 13

4.1 Representing Percents, pages 128–129

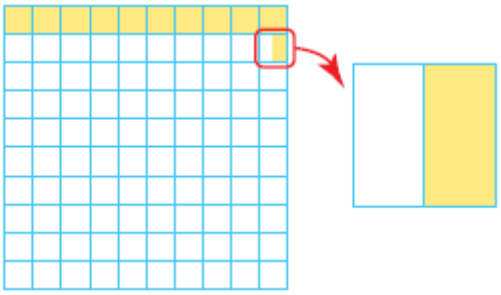
4. a) 112% **b)** $\frac{2}{10}\%$ **c)** $85\frac{1}{3}\%$

5. a) $\frac{3}{8}\%$ **b)** $125\frac{1}{2}\%$ **c)** 282%

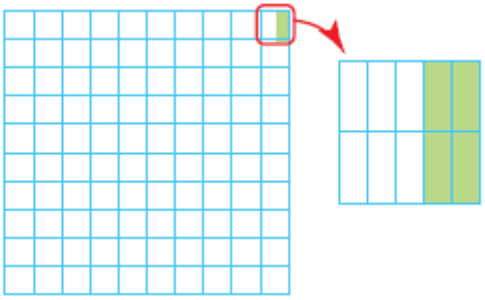
6. a)



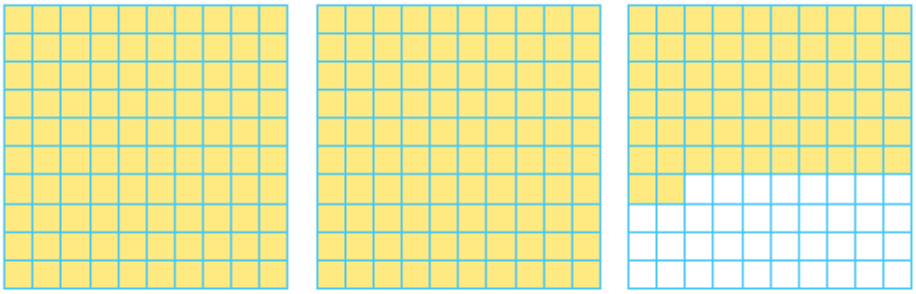
b)



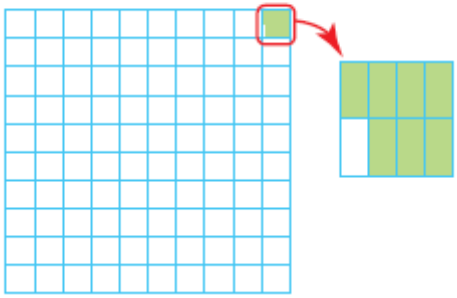
c)



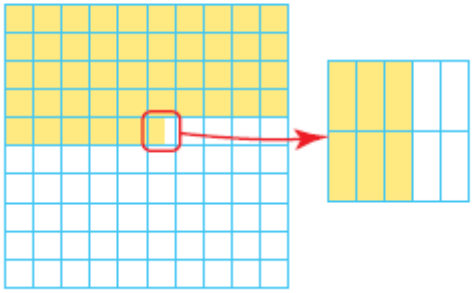
d)



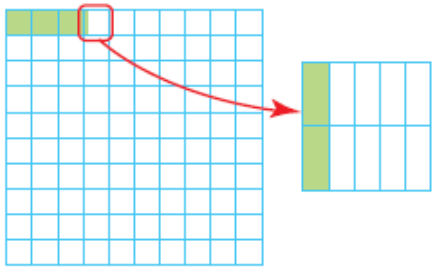
e)



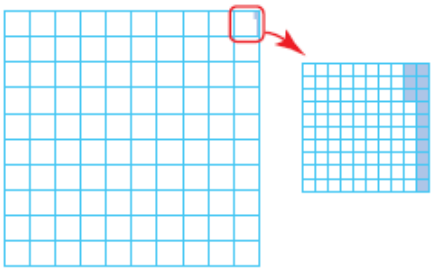
f)



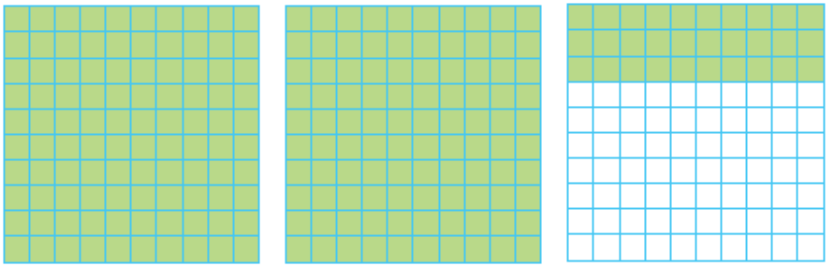
7. a)



b)



c)

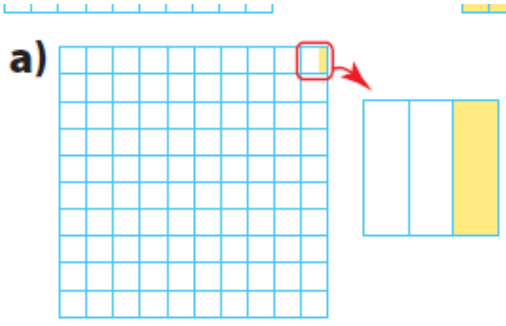


8. a) 3 **b)** 5 **c)** 12

9. Answers may vary. Example: Two situations where the percent will be greater than 100% are a mother's mass compared to her newborn child, and the volume of water in the Pacific Ocean in relation to a lake in Canada.

10. A scientist may need to relate the measurement of something that is less than 1% of its size. Example: The percent of different pollutants in the water will likely be between 0% ands 1%.

13. a)



b) Answers may vary. You must know how to convert a repeating decimal to fraction form.