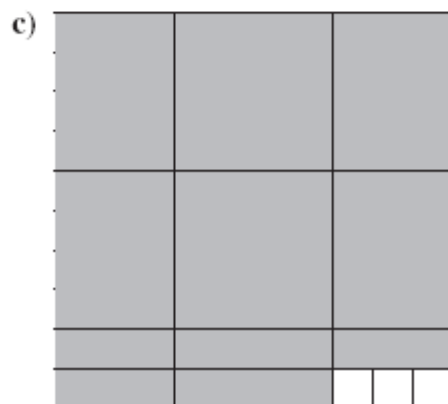
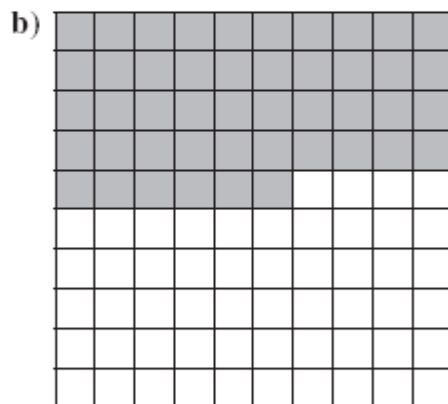
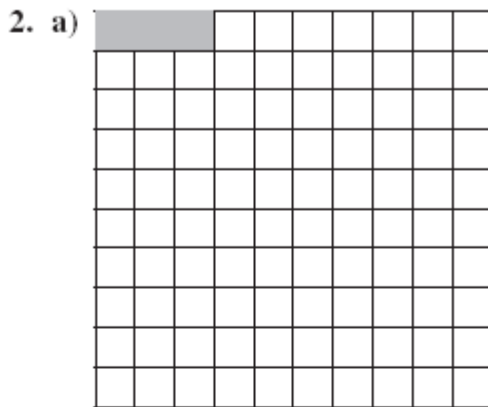


MathLinks 8 Practice and Homework Book

Chapter 4 Answers

4 Get Ready

1. a) 25% b) 89% c) 64%



3. a) $\frac{1}{4}$ or 0.25 or 25%

b) $\frac{3}{8}$ or 0.375 or 37.5%

c) $\frac{1}{2}$ or 0.50 or 50%

d) $\frac{4}{5}$ or 0.80 or 80%

4. a) $0.\overline{3}$ b) $0.\overline{45}$ c) $0.\overline{27}$

5. a) $0.\overline{81}$ or 81. $\overline{81}$ % b) $0.\overline{7}$ or 77. $\overline{7}$ %

c) $0.\overline{83}$ or 83. $\overline{3}$ %

6. Estimates may vary.

a) 17 b) 51 c) 52 d) 72

4.1 Representing Percents

1. c) shade more than one grid

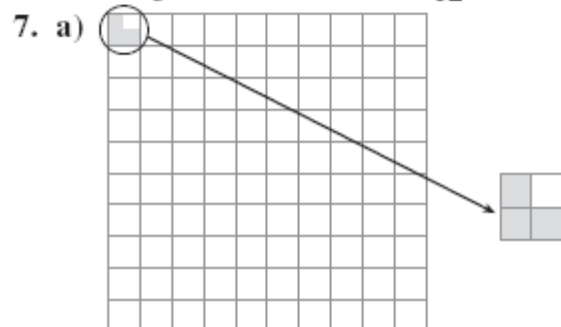
2. a) shade squares from a hundred grid to show the whole number and part of one square to show the fraction

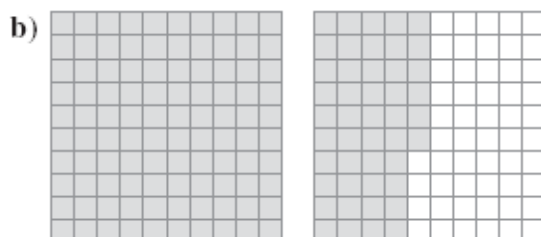
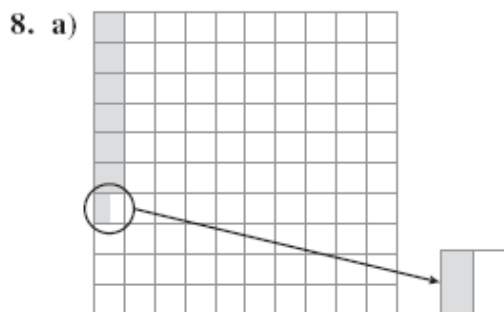
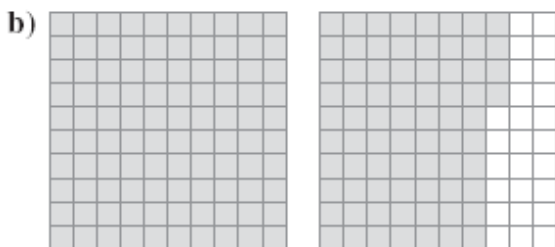
3. d) shade squares on a grid of 100 squares called a hundred grid

4. b) shade part of one square on a hundred grid

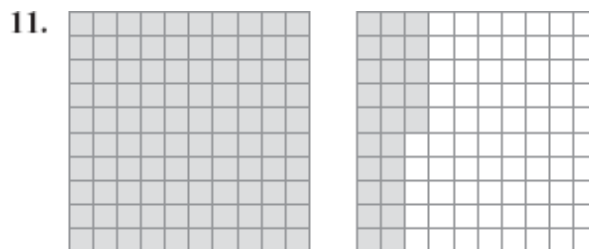
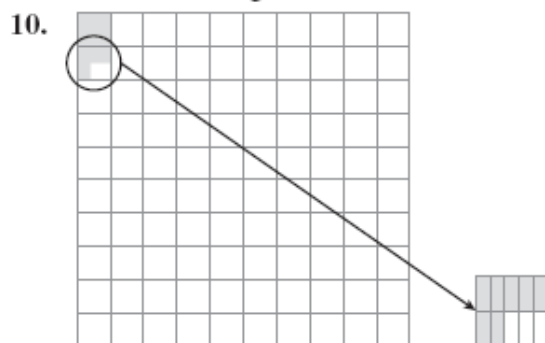
5. a) 144% b) $\frac{2}{3}\%$ c) 88.8%

6. a) $135\frac{7}{8}\%$ b) 256% c) $\frac{7}{12}\%$





9. a) 3. Explanations will vary. Example: You need 3 full grids because 230% is more than 2 full grids but less than 3.
 b) 7. Explanations will vary. Example: You need 7 full grids because 680% is more than 7 full grids but less than 8.
 c) 4. Explanations will vary. Example: You need 4 full grids because 395% is more than 3 full grids but less than 4.
 d) 15. Explanations will vary. Example: You need 15 full grids because 1420% is more than 14 full grids but less than 15.



4.2 Fractions, Decimals, and Percents

- hundred grid, division, 0.15, 0.15
- hundred grids, multiplication, 226%, 226%
- fractions, decimals
- a) 0.75 or 75% b) 0.07 or 7%
 c) 1.8 or 180% d) 0.125 or 12.5%
 e) 0.0375 or 3.75%
- a) 425% or $\frac{425}{100} = 17/4$
 b) 84.5% or $\frac{845}{1000} = \frac{169}{200}$
 c) 0.62% or $\frac{62}{10\,000} = \frac{31}{5000}$
- a) 7.35 or $\frac{735}{100} = \frac{147}{20}$
 b) 0.165 or $\frac{165}{1000} = \frac{33}{200}$
 c) 0.006 or $\frac{6}{1000} = \frac{3}{500}$
- 125%
- a) $\frac{21}{24}$ or $\frac{7}{8}$, 0.875, 87.5%
 b) $\frac{5}{30}$ or $\frac{1}{6}$, 0.1 $\bar{6}$, 16. $\bar{6}$ %
 c) $\frac{65}{25}$ or $\frac{13}{5}$, 2.6, 260%
- 0.00038, $\frac{38}{100\,000}$ or $\frac{19}{50\,000}$
- 26.9%

4.3 Percent of a Number

- a) \$0.66, dividing by ten
 b) 9, halving c) \$0.64, doubling
- decimal, multiply

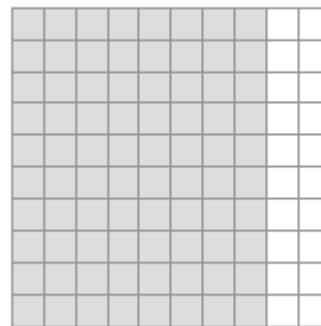
4 Link It Together

3. a) 9000, doubling
b) 0.6, dividing by 10
c) 1, halving
d) 21, dividing by 10
e) 12, doubling, dividing by 10
f) 1350, doubling, halving
4. a) 1.26 b) 71.63 c) \$874.16
d) 501.88 e) \$467.82
5. \$23 287.50
6. 3094 mg
7. Estimates may vary.
a) \$1000, \$916.50
b) 1 600 000, 1 792 000 c) 3000, 3087
8. 6621 km

4.4 Combining Percents

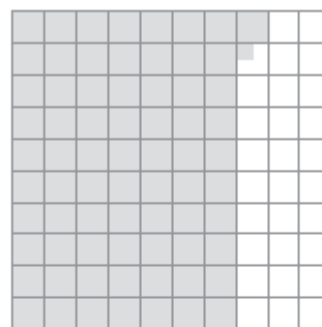
1. d)
2. a)
3. c)
4. b)
5. Estimates may differ.
a) \$134, \$134.47 b) \$ 24.20, \$23.73
c) \$36.80, \$35.03 d) \$38.40, \$38.47
6. 46
7. a) \$67.20
b) Yes. Explanations will vary. Example: a 50% off sale would have resulted in a \$60 price. This did not happen with the first sale because the second price change gave 20% off the first sale price. This was less than 20% off the original price.
8. a) \$180 b) \$199.80
9. 0.93 km^2
10. \$438.15
11. 22
12. \$9.68/h

1. a)



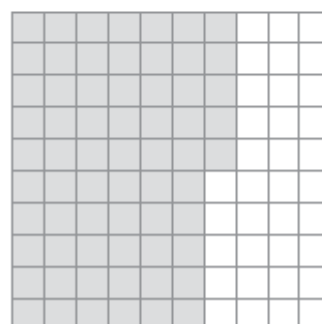
192 students

b)



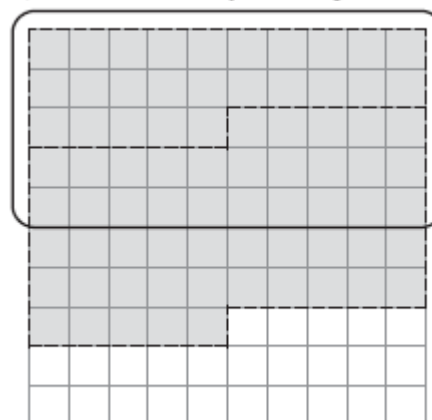
171 students

c)



312 attendees

2. a) Grids will vary. Example:



50%

b) 420

c) Answers will vary. Example: $66\frac{2}{3}\%$ of the students who attended brought two adults. This is a percent of the percent of students who attended. So, it is a smaller percent than $66\frac{2}{3}\%$ of the entire school population.

4 Vocabulary Link

1. d) greater than one
2. f) one
3. g) percent
4. c) fractional percent
5. b) double
6. e) halve
7. a) combined percent

