

Extra Practice: Skills and Word Problems

Lesson 1-1 Define variables and write an equation to model each situation.

- The total length of the edges of a cube is 12 times the length of an edge.
- The total cost of lunch is \$5.50 times the number of people at the table.
- The area of a rectangle is 12 cm times the length of the rectangle.
- The cost of a telephone call is 75 cents plus 25 cents times the number of minutes.

Lesson 1-2 Simplify each expression.

- $4 + 3 \cdot 8$
- $2 \cdot 3^2 - 7$
- $6 \cdot (5 - 2) - 9$
- $2 - 12 \div 3$
- $4^2 + 8 \div 2$
- $\frac{1}{2} \div \frac{4}{3}$
- $-6 \cdot 4.2 - 5 \div 2$
- $9 - (3 + 1)^2$
- $2 + 6 \cdot 8 \div 4$
- $6 + 8 \div 2 - 3$
- $10 \div 5 \cdot 2 + 6$
- $5 + 4 \cdot (8 - 6)^2$

Lesson 1-3 Use $<$, $=$, or $>$ to compare.

- $0.45 \blacksquare 0.54$
- $-1.08 \blacksquare -1.008$
- $\frac{3}{7} \blacksquare \frac{11}{25}$
- $1.4 \blacksquare \frac{18}{11}$
- $0.444 \dots \blacksquare \frac{4}{9}$
- $\frac{4}{13} \blacksquare \frac{4}{15}$
- $0.101101110 \dots \blacksquare \frac{1}{9}$
- $\pi \blacksquare \frac{22}{7}$

Lesson 1-4 The relationships in the tables are functions. Write a function rule for each.

25.

Ears of Corn	Total Cost
1	\$0.20
2	\$0.40
3	\$0.60
4	\$0.80

26.

Time (hours)	Cost of Canoe Rental
1	\$12
2	\$19
3	\$26
4	\$33

27.

Number of Tickets	Total Cost
1	\$9
2	\$18
3	\$27
4	\$36

Lesson 1-5

28. Make a scatter plot of the data. Describe the trend of the data.

Cover Price and Number of Pages of Some Magazines

Cover Price	\$2.25	\$2.50	\$3.75	\$3.00	\$4.95	\$1.95	\$2.95	\$2.50
Number of Pages	208	68	122	124	234	72	90	90

Lesson 1-6 Find the mean, median, and mode for each set of data.

29. 36, 42, 35, 40, 35, 51, 41, 35 30. 1.2, 0.9, 0.7, 1.1, 0.8, 1.3, 0.6 31. 5, 8, 6, 8, 3, 5, 8, 6, 5, 9

32. A student surveyed the members of the drama club. She included a question about age. Her results are shown at the right.

- Make a stem-and-leaf plot for the data.
- What is the median age of the drama club members?

Ages of Drama Club Members

14	18	16	15	17	14	15	18	15
13	14	15	18	14	17	16	14	16