

## Table of Contents

UNIT 1 (Lessons 1-30) ..... 4
UNIT 2 (Lessons 31-60). ..... 30
UNIT 3 (Lessons 61-90) ..... 54
UNIT 4 (Lessons 91-120) ..... 79

## Note to Parents

This book contains an Extra Practice Worksheet for each lesson that has new content in the Math 7 Course Books. Logic lessons, reviews, assessments, and enrichments do not have Extra Practice Worksheets. Extra Practice Worksheets are designed to be used for lessons in which a student struggled or to review certain concepts before or after an assessment. Parents may choose which Extra Practice Worksheets a student completes and when.

Writing Decimals, Estimating,
and Rounding

## EXTRA PRACTICE

For each problem, complete the following:
a. Estimate each product or quotient by using nearby numbers.
b. Use a calculator to find the exact product or quotient.
c. Determine whether the answer is a terminating or repeating decimal.
d. Round the answer to the nearest thousandth.

1. $0.8 \bullet 3.112$
a. $\qquad$
b. $\qquad$
c. $\qquad$
d. $\qquad$
2. $12.34 \bullet 3.68$
a. $\qquad$
b. $\qquad$
c. $\qquad$
d. $\qquad$
3. $65 \div 22$
a. $\qquad$
b. $\qquad$
c. $\qquad$
d. $\qquad$
4. $1.333 \bullet 0.777$
a. $\qquad$
b. $\qquad$
c. $\qquad$
d. $\qquad$
5. $105 \div 18$
a. $\qquad$
b. $\qquad$
c. $\qquad$
d. $\qquad$
6. $14 \div 27$
a. $\qquad$
b. $\qquad$
c. $\qquad$
d. $\qquad$
7. $2.75 \bullet 8.02$
$\qquad$
b. $\qquad$
c. $\qquad$
d. $\qquad$
8. $72.15 \div 3.2$
a. $\qquad$
b. $\qquad$
c. $\qquad$
d. $\qquad$

Multiplying and Dividing

## EXTRA PRACTICE

Multiply or divide.

1. $\frac{5}{8} \bullet \frac{8}{15}$
2. $\frac{2}{3} \cdot \frac{9}{20}$
3. $4 \cdot \frac{5}{16}$
4. $\frac{5}{3} \cdot 12$
5. $\frac{6}{7} \div \frac{6}{21}$
6. $\frac{1}{4} \div \frac{7}{24}$
7. $9 \div \frac{27}{2}$
8. $\frac{18}{13} \div 6$

## EXTRA PRACTICE

1. Plot and label the points on the coordinate plane.

Point $D$ at $(-3,2)$
Point $I$ at $(0,4)$
Point $S$ at $(3,-1)$
Point $T$ at $(6,2)$
Point $A$ at $(-1,-4)$
Point $N$ at $(-5,0)$
Point $C$ at $(-4,-1)$
Point $E$ at $(-1,3)$

2. Find the absolute value of each number.
a. -8
b. 6.73
C. $-10 \frac{1}{2}$
d. -12
e. 15
3. Using absolute values, find the distance between the following pairs of points.
a. $(10,-6)$ and $(15,-6)$
b. $(-4,-2)$ and $(-4,18)$

## EXTRA PRACTICE

Solve and graph each inequality on a number line.


Write and solve an inequality to answer each word problem.
7. Sierra has $\$ 9.25$ to spend on lunch. She buys a sandwich for $\$ 6.50$. What is the most Sierra can spend on dessert?
$\qquad$
8. Jeannie has $\$ 100$ she can spend on holiday gifts for her eight friends. What is the most she can spend on each gift if they cost the same amount?

## EXTRA PRACTICE

A calculator may be used for this entire practice worksheet.

1. Fill in the table with the amount of decrease and the percent decrease.

| Original Amount | New Amount | Amount of Decrease | Percent Decrease |
| :---: | :---: | :---: | :---: |
| 8 | 7.6 | 0.4 |  |
| 40 | 6 |  |  |
| 210 | 147 |  |  |

Fill in the table with the percent remaining and the new amount.

| Original Amount | Percent Decrease | Percent Remaining | New Amount |
| :---: | :---: | :---: | :---: |
| 45 | $20 \%$ |  |  |
| 70 | $14 \%$ |  |  |
| 550 | $75 \%$ |  |  |

. Fill in the table with the proportion, and then find the original amount.

| New Amount | Percent Decrease | Proportion | Original Amount |
| :---: | :---: | :---: | :---: |
| 6 | $40 \%$ |  |  |
| 70.4 | $80 \%$ |  |  |
| 360 | $50 \%$ |  |  |



## EXTRA PRACTICE

A calculator may be used for this entire practice worksheet.
Determine if the following tables represent direct proportions. Write "yes" or "no" on the line.

1. $\qquad$

| $x$ | 4 | 6 | 9 |
| :---: | :---: | :---: | :---: |
| $y$ | 16 | 18 | 36 |

2. $\qquad$

| $x$ | 5 | 8 | 11 |
| :---: | :---: | :---: | :---: |
| $y$ | 25 | 40 | 55 |

In each of the following problems, $x$ and $y$ are directly proportional. Find the constant of proportionality. Then write the equation to represent the proportional relationship and fill in the missing values.
3. $k=$ $\qquad$ Equation: $\qquad$

| $x$ | 1 | 3 | 5 | 7 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $y$ |  | 18 | 30 |  | 54 |

5. $k=$ $\qquad$ Equation: $\qquad$

| $x$ | 4 | 10 | 18 | 22 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $y$ | 2 | 5 |  | 11 | 15 |

4. $k=$ $\qquad$ Equation: $\qquad$ 6. $k=$ $\qquad$ Equation: $\qquad$

| $x$ | 8 | 5 | 4 | 2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $y$ | 80 | 50 |  | 20 | 10 |


| $x$ | 5 | 10 | 15 | 20 | 25 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $y$ | 3 |  | 9 | 12 |  |

Graphing Functions

## EXTRA PRACTICE

Use the equation of the function to complete the input/ output table. Then graph the function.

1. $y=x^{2}+3$
\(\left.$$
\begin{array}{|c|c|}\hline x \\
\text { (input) }\end{array}
$$ \begin{array}{c}y <br>

(output)\end{array}\right]\)| -2 |
| :---: |


2. $y=4 x^{2}-9$
$\left.\begin{array}{|c|c|}\hline x \\ \text { (input) }\end{array} \begin{array}{c}y \\ \text { (output) }\end{array}\right\}$


Determine if each graph is a function using the vertical line test. Write "yes" or "no" on the line.

4.

5.


## EXTRA PRACTICE

A calculator may be used for this entire practice worksheet.
Find the area of the shaded region by subtracting the area of the inscribed shape from the area of the outer shape. Round to the nearest hundredth when necessary.

1. Area of square: $\qquad$
Area of circle:
$\qquad$
Area of shaded region: $\qquad$

2. Area of circle: $\qquad$
Area of triangle: $\qquad$
Area of shaded region: $\qquad$

3. Area of square: $\qquad$
Area of circle: $\qquad$
Area of shaded region: $\qquad$
4. Area of large square: $\qquad$
Area of small square: $\qquad$
Area of shaded region: $\qquad$


8 in

Note: Some measurements are rounded.

## EXTRA PRACTICE

Determine the shape of the base of each polyhedron. Write the letter on the line provided.
A. Circle
B. Square
C. Rectangle
D. Triangle
E. Pentagon
F. Hexagon

1. $\qquad$

2. $\qquad$

3. $\qquad$

4. $\qquad$

5. $\qquad$

6. $\qquad$


Determine the shape of the cross section shown for each polyhedron. Use the same letters as above.
7. $\qquad$

9. $\qquad$

8. $\qquad$

10. $\qquad$


## EXTRA PRACTICE

Time Spent Caring for Pet

4. Find the percent of time spent doing each task. Round to the nearest tenth of a percent.
a. Grooming: $\qquad$
b. Feeding: $\qquad$
c. Playing: $\qquad$
d. Walking: $\qquad$

Use the line graph to answer Problems 5 through 8.

5. Nolan tracked how many miles he ran during a five-month period.
a. In which month did he run the greatest number of miles? $\qquad$
b. How many miles did he run during that month? $\qquad$
6. How many more miles did Nolan run in August than in May? $\qquad$
7. In which two months did he run the same number of miles?
$\qquad$ and $\qquad$
8. How many total miles did Nolan run during this five-month period? $\qquad$
$\sum$ LESSON 110

## EXTRA PRACTICE

Classify each graph as symmetric, left skewed, or right skewed.
1.

4. $\qquad$

7.

2. $\qquad$
5.

3.

6. $\qquad$
8. $\qquad$

9. $\qquad$


Determine if each graph is unimodal or bimodal.
10. $\qquad$

11. $\qquad$


