9

## Homework

## Activity 1

Tell what type of number or pattern is being described by each of the algebraic patterns.

1. $2 \cdot n$ 2. $\frac{n}{5}$
(a) prime
(b) divisible by 3
(c) even
2. $2 \cdot n+1$
(a) even
(b) divisible by 2
(c) odd
(a) even
(b) divisible by 5
(c) odd
3. $\frac{n}{2}$ and $\frac{n}{3}$
(a) even
(b) divisible by 3
(c) divisible by 6

## Activity 2

Tell the numbers in each list that apply to the rule. Use the algebra rules to help you.

1. Which numbers are prime?
$\begin{array}{llllllllllll}1 & 2 & 4 & 5 & 7 & 9 & 11 & 12 & 13 & 15 & 21 & 23\end{array}$
2. Which numbers are divisible by 3?
$\begin{array}{llllllllllll}111 & 122 & 124 & 135 & 157 & 169 & 211 & 212 & 313 & 414 & 521 & 523\end{array}$
3. Which numbers are divisible by 6?
$\begin{array}{llllllllllll}51 & 62 & 64 & 65 & 77 & 99 & 111 & 312 & 413 & 515 & 621 & 723\end{array}$
4. Which numbers are divisible by 5 ?
$\begin{array}{lllll}15 & 23 & 42 & 55 & 60\end{array}$
7595
$96 \quad 97 \quad 100$
210
230

## Homework

## Activity 3

## Tell the percent decrease.

1. Jones Lake was 100 feet deep and Taylor Lake was 88 feet deep last year. Both lakes dropped 4 feet this year. What was the percent decrease for each lake?
2. The Scatter Plots sold 3,427 CDs last year. They sold 1,500 fewer this year. What was the percent decrease in sales?
3. There were 500 students in the senior class last year. This year there were 150 fewer students. What was the percent decrease in the number of students?

## Activity 4 • Distributed Practice

Solve.

1. $\frac{6}{9}-\frac{1}{8}=a$
2. $32.4 \cdot 5=b$
3. $\frac{7}{11} \div \frac{4}{5}=c$
4. $1,698 \cdot 25+4,876.19+2,500.47=d$
5. Write the decimal number 0.99 as a percent.
6. Write the fraction $\frac{3}{8}$ as a decimal number.
7. Write $54 \%$ as a fraction.
8. Write $0.1 \%$ as a decimal number.
