## Warm Up

24) 1896<br>31) 2914<br>$5 5 \longdiv { 1 2 6 5 }$<br>$7 3 \longdiv { 6 4 9 7 }$

# Warm Up Answers 

$2 4 \longdiv { 1 8 9 6 }$
$3 1 \longdiv { 9 4 }$
$5 5 \longdiv { 1 2 6 5 }$
$73 \lcm{6497}$

## Homework Answers

You did not have homework last night. Hope you enjoyed your night off!

## Essential Question:

Without dividing, how can you tell when a number is divisible by another number?

## Lesson Objective:

Students will be able to:
write divisibility rules for $2,3,5,6,9$, and 10 and use the divisibility rules to help write the prime factorization of numbers.

## Self-Evaluation Scale

| ScOre | I can teach other students how to write divisibility rules for 2, 3, 5, 6, 9, <br> and I0 and use the divisibility rules to help write the prime <br> factorization of numbers. |
| :--- | :--- |
| 2 | I can write divisibility rules for 2, 3, 5, 6, 9, and I0 and use the <br> divisibility rules to help write the prime factorization of numbers. |
| 2 | I recognize, but still need help to write divisibility rules for 2, 3, 5, 6, 9, <br> and I0 and use the divisibility rules to help write the prime <br> factorization of numbers. |
| 1 | I do not know how to write divisibility rules for 2, 3, 5, 6, 9, and I0 <br> and use the divisibility rules to help write the prime factorization of <br> numbers. |
| 1 |  |

## Activity 1 \& 2

With a partner, work on Activity I \& 2 on page 24 of your Big Ideas Record Text Book.

1 ACTIVITY: Finding Divisibility Tests for 2, 3, 5, and 10
Work with a partner.

|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |

a. Highlight all the numbers that are divisible by 2 .
b. Put a box around the numbers that are divisible by 3 .
c. Underline the numbers that are divisible by 5 .
d. Circle the numbers that are divisible by 10 .
e. STRUCTURE In parts (a)-(d), what patterns do you notice? Write four rules to determine when a number is divisible by $2,3,5$, and 10 .

2 ACTIVITY: Finding Divisibility Rules for 6 and 9

## Work with a partner.

a. List ten numbers that are divisible by 6 . Write a rule to determine when a number is divisible by 6 . Use a calculator to check your rule with large numbers.
b. List ten numbers that are divisible by 9 . Write a rule to determine when a number is divisible by 9 . Use a calculator to check your rule with large numbers.

## Homework

No Homework

