

STUDY LINK
1•5

Divisibility Rules



- ◆ All even numbers are divisible by 2.
- ◆ A number is divisible by 3 if the sum of its digits is divisible by 3.
- ◆ A number is divisible by 6 if it is divisible by both 2 and 3.
- ◆ A number is divisible by 9 if the sum of its digits is divisible by 9.
- ◆ A number is divisible by 5 if it ends in 0 or 5.
- ◆ A number is divisible by 10 if it ends in 0.

1. Use divisibility rules to test whether each number is divisible by 2, 3, 5, 6, 9, or 10.

| Number | Divisible... | | | | | |
|---------|--------------|-------|-------|-------|-------|--------|
| | by 2? | by 3? | by 6? | by 9? | by 5? | by 10? |
| 998,876 | | | | | | |
| 5,890 | | | | | | |
| 36,540 | | | | | | |
| 33,015 | | | | | | |
| 1,098 | | | | | | |

A number is divisible by 4 if the tens and ones digits form a number that is divisible by 4.

Example: 47,836 is divisible by 4 because 36 is divisible by 4.

It isn't always easy to tell whether the last two digits form a number that is divisible by 4. A quick way to check is to divide the number by 2 and then divide the result by 2. It's the same as dividing by 4, but is easier to do mentally.

Example: 5,384 is divisible by 4 because $84 \div 2 = 42$ and $42 \div 2 = 21$.

2. Place a star next to any number in the table that is divisible by 4.

Practice

3. $250 * 7 =$ _____

4. $1,931 + 4,763 + 2,059 =$ _____

5. $(20 + 30) * 5 =$ _____

6. $78 \div 6 =$ _____

