

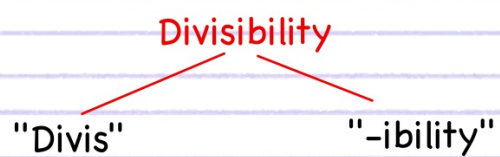


Divisibility Rules

Created by Keri Heusdens
Kenosha, WI



Vocabulary



Use the divisibility rule for 2 to decide if each is divisible by 2.



Yes

34 15432 910
27,156 318

No

317 801
43
6025 2439

Divisible by 5

if it ends
in 5 or 0

Divisible by 10

if it ends
in 0.

Which of these will BOTH 5 and 10 divide into?

A 45

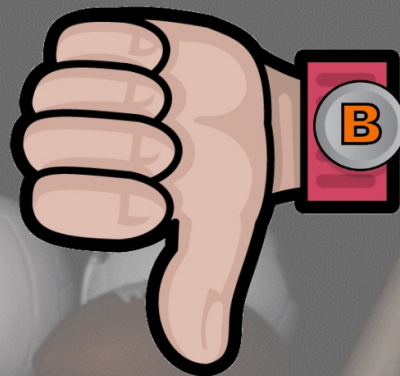
B 50

C 55



Check point

I've got this!



Divisibility Rule for 3

A number is divisible by 3 if...

The sum of its digits are divisible by 3

Divisibility rule for 9

A number is divisible by 9 if...

The sum of its digits are divisible by 9

Use the rules for 3 and 9 to determine whether or not each number is divisible by 3 or 9 or both

3
210
345
969
6207

9

Both
9810
774
4536

Neither
34,216
15,589⁸⁸⁹

More Divisibility Rules...

Tests for Divisibility

A number is divisible by ...

3 if the sum of its digits is divisible by 3.

6 if the number is divisible by 2 and 3.

9 if the sum of its digits is divisible by 9.



438

$4 + 3 + 8$
15

Y

3?

Y

6?

N

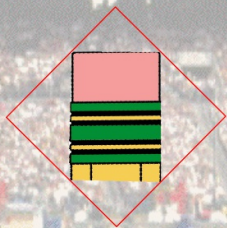
9?

456

Are these
divisible by
3, 6, or 9?

576

567



Y

3?

Y

3?

Y

3?

Y

6?

N

6?

Y

6?

N

9?

Y

9?

Y

9?

Which of these is divisible by 3?

A 179

B 180

C 181

Which of these is divisible by 6?

A 578

B 615

C 702

Which of these is divisible by 9?

A 567

B 321

C 644

One more rule!

A number is divisible by 4 if the last two digits are divisible by 4

8,512

Y

518

N

78,628

Y

A number is divisible by:

2 if it is an even number

3 if the sum of the digits are divisible by 3

4 if the last two digits are divisible by 4

5 if it ends in 5 or 0

6 if it is divisible by 2 and 3

9 if the sum of the digits are divisible by 9

10 if it ends in 0