

Divisibility rules

Use the rules to test each number. You do not need to divide.

1 Study the rules and the model.

Divisibility rules

÷ 2

The last digit is even: 0, 2, 4, 6 or 8.

÷ 5

The last digit is 0 or 5.

÷ 10

The last digit is 0.

÷ 3

The sum of the digits can be divided by 3.

÷ 9

The sum of the digits can be divided by 9.

÷ 6

It passes the tests for both 2 and 3.

Worked example: test 234

Last digit 4: even, so ÷ 2 yes. Not 0 or 5, so ÷ 5 no and ÷ 10 no.
Digit sum 2 + 3 + 4 = 9: ÷ 3 yes and ÷ 9 yes. Both 2 and 3 work, so ÷ 6 yes.

2 Tick every number each one can be divided by.

Number	Digit sum	÷ 2	÷ 3	÷ 5	÷ 6	÷ 9	÷ 10
36		☐	☐	☐	☐	☐	☐
45		☐	☐	☐	☐	☐	☐
70		☐	☐	☐	☐	☐	☐
84		☐	☐	☐	☐	☐	☐
111		☐	☐	☐	☐	☐	☐
135		☐	☐	☐	☐	☐	☐
240		☐	☐	☐	☐	☐	☐
306		☐	☐	☐	☐	☐	☐
425		☐	☐	☐	☐	☐	☐
522		☐	☐	☐	☐	☐	☐
810		☐	☐	☐	☐	☐	☐
998		☐	☐	☐	☐	☐	☐

3 Solve the egg farm problems. Write the rule you used.

13. The farm collects 144 eggs.
Can they all go in cartons of 6 with none left over?

Rule _____

Yes or no

14. Ximena has 135 eggs. Can she pack them all in trays of 10 with none left over?

Rule _____

Yes or no

CARL Grades 4–6 math

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