Testing Divisibility Worksheets

ANSWER / CASE 1

Which of 2, 3, 5, 9 and 10 divide 126 exactly? Explain using divisibility rules.

Candidate divisor	Divides exactly?
2	?
3	?
5	?
9	?
10	?

ANSWER: 2, 3, 9
1. The last digit is 6; the digit sum is 9.
2. Use last-digit tests for 2, 5 and 10; use digit sums for 3 and 9.

Testing Divisibility Worksheets

ANSWER / CASE 2

Which of 2, 3, 5, 9 and 10 divide 245 exactly? Explain using divisibility rules.

Candidate divisor	Divides exactly?
2	?
3	?
5	?
9	?
10	?

ANSWER: 5
1. The last digit is 5; the digit sum is 11.
2. Use last-digit tests for 2, 5 and 10; use digit sums for 3 and 9.

Testing Divisibility Worksheets

ANSWER / CASE 3

Which of 2, 3, 5, 9 and 10 divide 360 exactly? Explain using divisibility rules.

Candidate divisor	Divides exactly?
2	?
3	?
5	?
9	?
10	?

ANSWER: 2, 3, 5, 9, 10
1. The last digit is 0; the digit sum is 9.
2. Use last-digit tests for 2, 5 and 10; use digit sums for 3 and 9.

Testing Divisibility Worksheets

ANSWER / CASE 4

Which of 2, 3, 5, 9 and 10 divide 414 exactly? Explain using divisibility rules.

Candidate divisor	Divides exactly?
2	?
3	?
5	?
9	?
10	?

ANSWER: 2, 3, 9
1. The last digit is 4; the digit sum is 9.
2. Use last-digit tests for 2, 5 and 10; use digit sums for 3 and 9.