Answer key

The method: Divisibility rules

By 2: even. By 5: ends in 0 or 5. By 10: ends in 0. By 3 or 9: the sum of the digits is divisible by 3 or 9.

Which of 2, 3, 5, 9, 10 divide 360? 2, 3, 5, 9, 10

Last digit 0: 2 ✓, 5 ✓, 10 ✓

Digit sum 3 + 6 + 0 = 9: 3 ✓, 9 ✓

Problems 1 and 2 worked out · Version 0A

Which of 2, 3, 5, 9, 10 divide 585? 3, 5, 9

Last digit 5: not 2, 5 ✓, not 10

Digit sum 5 + 8 + 5 = 18: 3 ✓, 9 ✓

Which of 2, 3, 5, 9, 10 divide 437? none

Last digit 7: not 2, not 5, not 10

Digit sum 4 + 3 + 7 = 14: not 3, not 9

Divisibility rules · Version 0A

1) 3, 5, 9 2) none 3) 3 4) none 5) 2, 3, 5, 9, 10
6) 2, 3, 5, 10 7) 2, 3, 5, 9, 10 8) 3, 5, 9
9) 2, 3, 5, 9, 10 10) 2, 3, 5, 10 11) 2, 3, 5, 10
12) 2, 3, 5, 10 13) 2, 3, 5, 10 14) 3, 5 15) none
16) 2, 3, 5, 9, 10 17) 2, 3 18) 2, 3, 5, 10
19) 2, 3, 5, 10 20) 2, 3, 5, 9, 10 21) 2, 5, 10
22) 2, 3, 5, 9, 10 23) 2, 3, 5, 9, 10 24) 2, 3, 5, 10
25) 3, 5, 9 26) none 27) 2 28) 2 29) none