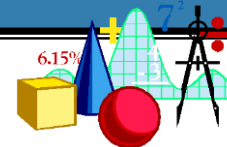


Mathematics, Grade 8

Unit IV: Lesson 2

Puzzle / Report: **Magic Square Puzzle #2**



Review the pattern for creating a magic square:

33 42 51 4 13 22 31 48 55 32 39 46 8 16

3 5 7 4 1

50 10 12 21 30 32 54 36 38 45 47 4 9 2

49 9 11 20 29 38 40 35 37 44 51 53

8 17 19 28 37 39 48 41 43 50 52 34

16 18 27 36 45 47 7 42 49 56 33 40

24      26 35 44 46 6 15

13 6 11

8 10 12

MAGIC  
SQUARES

9 14 7

25      34 43 52 5 14 23

Design a 9 x 9 or larger magic square. Use positive and negative integers and zero. Investigate the result if you add, subtract, multiply or divide each number in the magic square by a fraction. Is the result another magic square?

Display your puzzles in the classroom. Summarize the results of your investigation in a brief report to include with the display.

***Extension:*** Try creating an odd-sized magic square that has a different pattern.