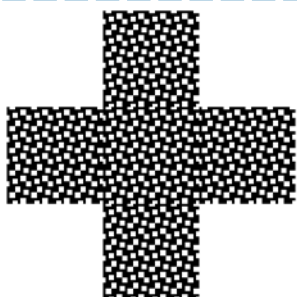


Puzzle Page

Use the numbers 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 once each to produce three square numbers.

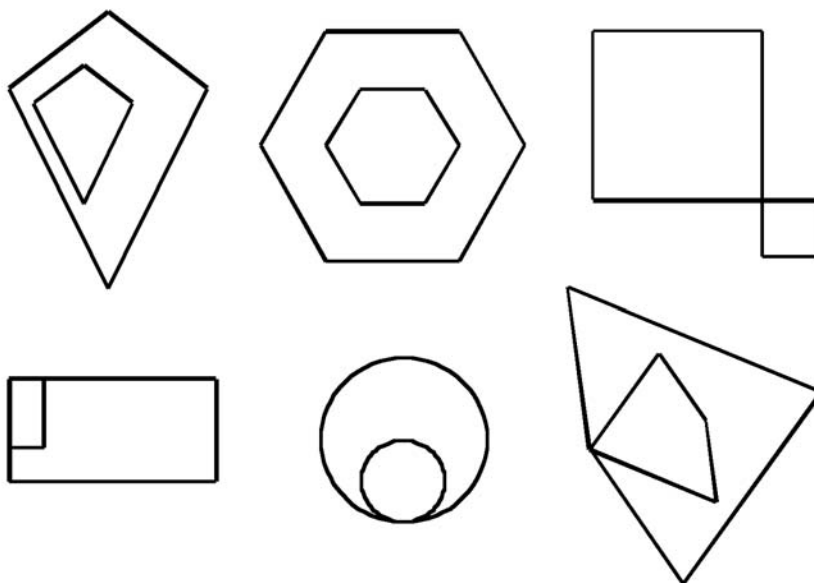


The area and perimeter of the piece of land shown have the same numerical value, but one is in metres and the other in square metres. What is the value?

There are 24 combinations of the digits 1, 3, 4, 8. Find the four combinations that are prime numbers.

Phil Dodd teaches mathematics in Haughton le Spring in the north east of England.

In each of the following 11 situations where is the centre of enlargement?



{2, 3, 5, 7, 11, 13 ...} and {4, 6, 10, 14, 22, 26 ...}

{4, 9, 16, 25, 36 ...} and {6, 16, 30, 48, 70 ...}

$y = x + 3$ and $y = 3x - 1$

$y = x + 2$ and $y = x + 4$

$y = x^2$ and $y = -2x^2 + 12x - 18$

Are you sure?

Derek Ball is retired but runs masterclasses. Go to page 17 for another of Derek's puzzles.



Leaping Around

This year, 29 February fell on a Friday. On which day of the week will the next 29 February fall? Why?

What about 29 February, 3008?

Why is 29 February more likely to fall on some days of the week than on others?

Herman Hollerith (29 February 1860 – 17 November 1929) was a statistician and engineer, known for developing the use of punched card data processing. He was a leaping, being born on 29 February. How many birthdays did he have? Why?

Colin Foster teaches mathematics at King Henry VIII School, Coventry, and is one of the editors of MT.

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*Now, this bit is
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