

WEEK 17 – WEEKLY MATHS CHALLENGE



@sthildasmaths



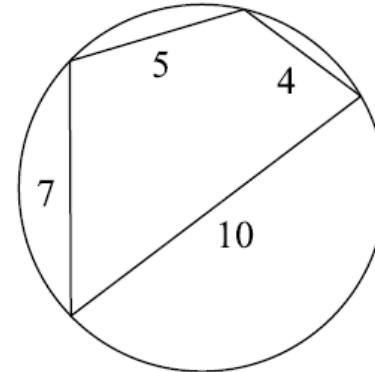
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Brahmagupta (598 – 670 AD) gave the following formula for the area of a cyclic quadrilateral:

$$A = \sqrt{(s - a)(s - b)(s - c)(s - d)},$$

where a , b , c and d are the 4 sides, and s is **half** the perimeter of the quadrilateral.

Find the area of this cyclic quadrilateral.



KEYS TERM OF THE WEEK

Cyclic Quadrilateral: a four-sided shape where all four vertices are on the circumference (also, opposite angles in a cyclic quadrilateral always add to make 180°).



Mrs. Ray's fun maths fact:

"I usually spend about $\sqrt{13225}$ minutes running every week!"

Submit your answers on a piece of paper with your name and form on by the END OF FRIDAY to the box by **student services**. Winner revealed next Wednesday!