

AFRICAN INSTITUTE FOR MATHEMATICAL SCIENCES

SCHOOLS ENRICHMENT CENTRE (AIMSSEC)

AIMING HIGH

MAGIC 13837

Maths Magic

13837 x Your Age x 73

Answer = ?

Just Try It ©

Try the ages of your family and friends.

What happens?

Can you explain it?

Does this work for very old people over the age of 99? Why or why not?

HELP

Work out:

- a. 101×23
- b. $10\,101\times23$
- c. 101×45
- d. 10 101 × 45
- e. 1 010 101 × 45

What do you notice? Can you explain what happens?

This should help you to explain the magic of 13837.

NEXT

The oldest verified age of a living person was 122 years and 164 days: Jeanne Calment of France, who died in 1997. Would this number trick work for her age? Why or why not?

Work out

- (a) 1001×234
- (b) 10001 × 4567
- (c) 1001001×432
- (d) 1001001001 × 765

What happens? Why?

Can you make up some similar multiplications like this?