## AFRICAN INSTITUTE FOR MATHEMATICAL SCIENCES <br> SCHOOLS ENRICHMENT CENTRE (AIMSSEC) <br> AIMING HIGH

## MAGIC 13837

## Maths Magic <br> 13837 x Your Age $\times 73$

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?

## Answer = ? <br> Just Try It ©

## HELP

Work out:
a. $101 \times 23$
b. $10101 \times 23$
c. $101 \times 45$
d. $10101 \times 45$
e. $1010101 \times 45$

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) $1001 \times 234$
(b) $10001 \times 4567$
(c) $1001001 \times 432$
(d) $1001001001 \times 765$

What happens? Why?
Can you make up some similar multiplications like this?

