## Q Talk maths



Try to out-smart an adult. Ask them to solve a calculation mentally, then give them a challenge such as to multiply a square or cube number by a power of 10 . For example:


What is seven squared times a thousand?
What is three cubed times one hundred thousand?
If you are feeling brave, work out some answers in advance and then try out-smarting an adult with a mental division, for example:

What is forty-nine thousand divided by seven?
What is two thousand seven hundred divided by three?

## $\checkmark$ Check

1. Solve these multiplications mentally.
a. $24 \times 200=$ $\qquad$
b. $62 \times 1000=$ $\qquad$ c. $40 \times 40=$ $\qquad$
d. $25 \times 2000=$ $\qquad$
e. $43 \times 10,000=$ $\qquad$ f. $100 \times 10,000=$ $\qquad$
2. Now solve these divisions using mental methods.
a. $6000 \div 3=$ $\qquad$ b. $125 \div 5=$ $\qquad$ c. $125,000 \div 5=$ $\qquad$
d. $360,000 \div 4=$ $\qquad$ e. $640,008 \div 8=$ $\qquad$ f. $125,000 \div 5=$ $\qquad$
3. Use your knowledge of inverses to solve these.
a. If $27,072 \div 576=47$, what does $576 \times 47=$ $\qquad$
b. If $4320 \times 723=3,123,360$, what does $3,123,360 \div 4320=$ $\qquad$

## A Problems

Brain-teaser A football stadium holds 8000 people. How much money would be collected for a sell-out match if each ticket was £20?

Brain-buster For a different football match, tickets are sold for £30, but only $£ 90,000$ is collected.

How many tickets were sold?


