

## MATHS BRAINTEASER

Hello everybody, and welcome to Week 7 of the RMS Weekly Maths Brainteasers. Here was last week's teaser along with Prathush's (Year 9) solution.

### The RMS Weekly Maths Brainteaser

#### Week 6 Spilled Juice

Henry had just finished his maths homework when he spilled orange juice all over it. Can you help Henry figure out what his homework problems (and solutions!) were?

$$\begin{array}{r} 1 \\ + 16 \\ \hline 1 \end{array}$$
$$\begin{array}{r} 30 \\ + 11 \\ + 5 \\ \hline 10 \end{array}$$
$$\begin{array}{r} 1 \\ \times 9 \\ \hline 7 \end{array}$$
$$\begin{array}{r} 4 \\ - 13 \\ \hline 8 \end{array}$$
$$\begin{array}{r} 52 \\ - 14 \\ \hline 07 \end{array}$$
$$\begin{array}{r} 23 \\ \times 8 \\ \hline 8 \end{array}$$

Please send your answer with your name and form to Mr Pooles at [graham.pooles@rmays.com](mailto:graham.pooles@rmays.com). The correct answer will be revealed at the end of next week, along with another brainteaser!

$$\begin{array}{r} 15 \\ + 16 \\ \hline 31 \end{array}$$
$$\begin{array}{r} 30 \\ + 11 \\ + 59 \\ \hline 100 \end{array}$$
$$\begin{array}{r} 13 \\ \times 9 \\ \hline 117 \end{array}$$
$$\begin{array}{r} 41 \\ - 13 \\ \hline 28 \end{array}$$
$$\begin{array}{r} 521 \\ - 114 \\ \hline 407 \end{array}$$
$$\begin{array}{r} 23 \\ \times 6 \\ \hline 138 \end{array}$$

6 correct answers again last week. Well done to all of you.

This week's teaser requires knowledge of a famous Theorem attributed to Pythagoras (although it wasn't him who discovered it). Therefore, if you're not sure of what this is, you may need to do a bit of research.

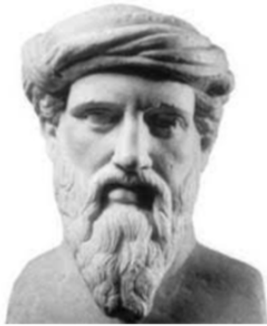
Best of luck

Mr Pooles

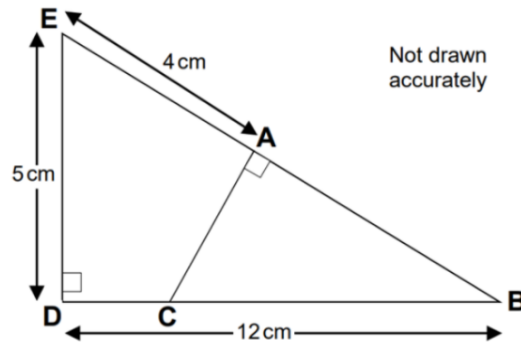
## The RMS Weekly Maths Brainteaser

Week 6

Pythagoras



The diagram shows two right-angled triangles ABC and DEB.



Find the length of the line AC.

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