More typical of the solutions were clever ideas involving similar triangles and Ptolemy's Theorem. The following solution uses ideas from Cindy, Joshua and William.

Let AD and BE intersect at X. Then $\triangle AED$ and $\triangle AXE$ are similar and so

$$AD^2$$
: AE^2 = area $\triangle AED$: area $\triangle AXE = AD$: $AX = 2$: 1.

Therefore $AD = \sqrt{2}AE$.

Also,

| | AB.DE + AE.BD = AD.BE | (Ptolemy) |
|---|---------------------------------|-----------|
| ⇒ | $AE.BC + AE.BD = \sqrt{2}AE.BE$ | |
| ⇒ | $BC + BD = \sqrt{2}BE.$ | |

The first prize of $\pounds 25$ is awarded to Cindy Zhang and the second prize of $\pounds 20$ is awarded to Daniel Lin.

STAN DOLAN

In Memoriam

It is with great regret that we have to record the deaths of three individuals all of whom had significant links with the Mathematical Association.

Clive Kilmister

January 1924 - May 2010

Clive died at home on May 2nd. He was the MA president for the year 1979 to 1980 and his links with the *Gazette* continued, most notably as a reviewer. In his professional life, he had been Professor of Mathematics at King's College, London.

William Wynne-Willson

November 1932 - May 2010

WWW died on May 9th. He was the MA president for the year 1993 to 1994. Professionally, he worked in the field of mathematics education from the University of Birmingham.

Martin Gardner

Martin Gardner, the world famous mathematics writer died, aged 95, on May 22nd. He was an Honorary Member of the Mathematical Association.