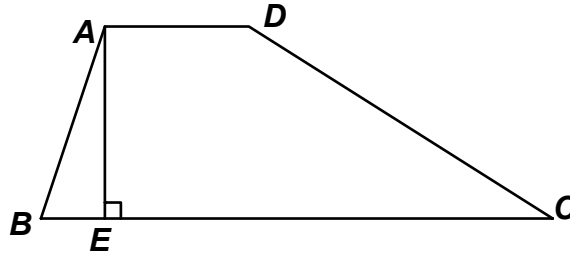**Addendum:**

The original statement of question A in round 3 was problematic.

Find the exact area of trapezoid $ABCD$, given $AB = 25$, $BC = DC = 40$, $AE = 24$
The diagram is not necessarily drawn to scale.

Answers of 492 and 1260 were accepted.