



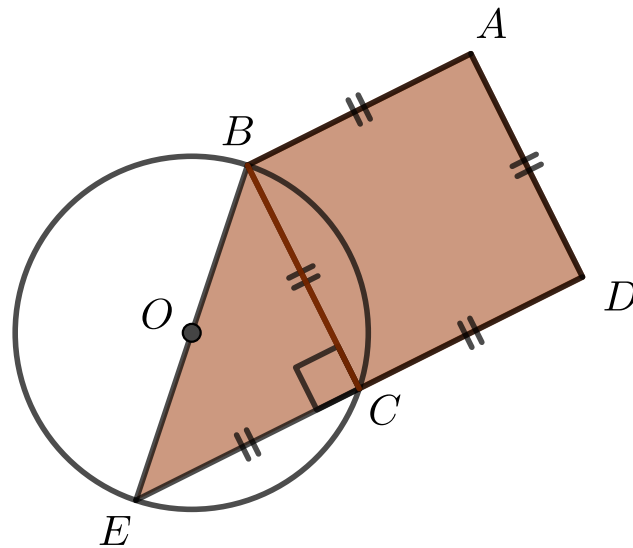
## Problem of the Week

### Problem C

### Circle and Other Shapes

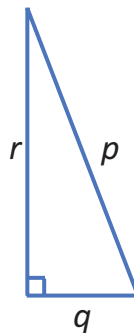
Quadrilateral  $ABED$  is made up of square  $ABCD$  and right isosceles  $\triangle BCE$ .  $BE$  is a diameter of the circle with centre  $O$ . Point  $C$  is also on the circle.

If the area of  $ABED$  is  $24 \text{ cm}^2$ , what is the length of  $BE$ ?



The *Pythagorean Theorem* states, “In a right triangle, the square of the length of hypotenuse (the side opposite the right angle) equals the sum of the squares of the lengths of the other two sides”.

In the following right triangle,  $p^2 = r^2 + q^2$ .



**STRANDS** GEOMETRY AND SPATIAL SENSE, MEASUREMENT

