



Problem of the Week

Problem E

Love is Blind Valentine

A heart is constructed by attaching two white semi-circles, each with radius 2 cm, onto the hypotenuse of an isosceles right triangle. The heart is then pasted onto a rectangular sheet of red construction paper as illustrated below. (The dashed lines, the side measurement and the right angle symbol will not actually be on the finished card.)

Cupid shoots an arrow that randomly lands somewhere on the card.

Determine the probability that Cupid's arrow lands on the heart.

