1. Find the value of the positive constant C so that the parabolas $y = x^2$ and $y = C - x^2$ (shown in the picture below on the left) intersect at right angles (that is, the graphs are *orthogonal*).

2. Find the value of the positive constant D so that the parabolas $y = x^2$ and $y = (D - x)^2$ (shown in the picture below on the right) intersect at right angles (that is, the graphs are *orthogonal*).