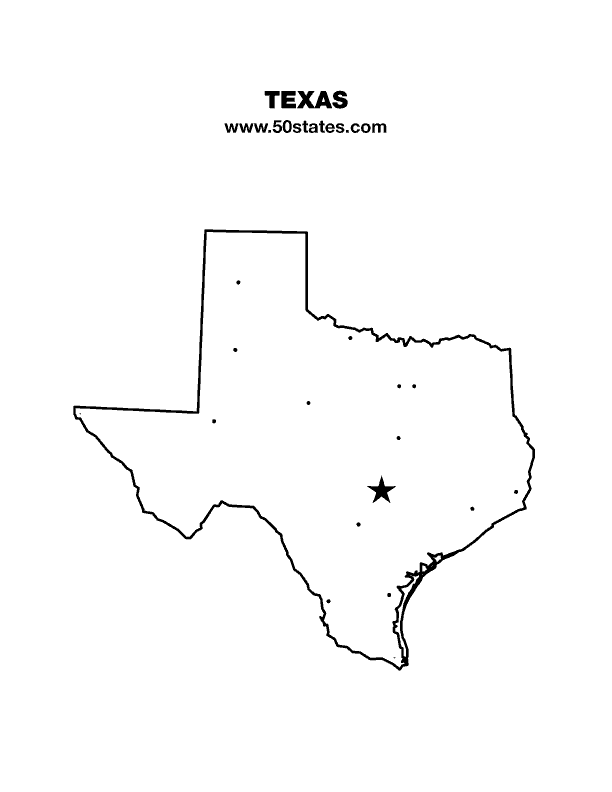
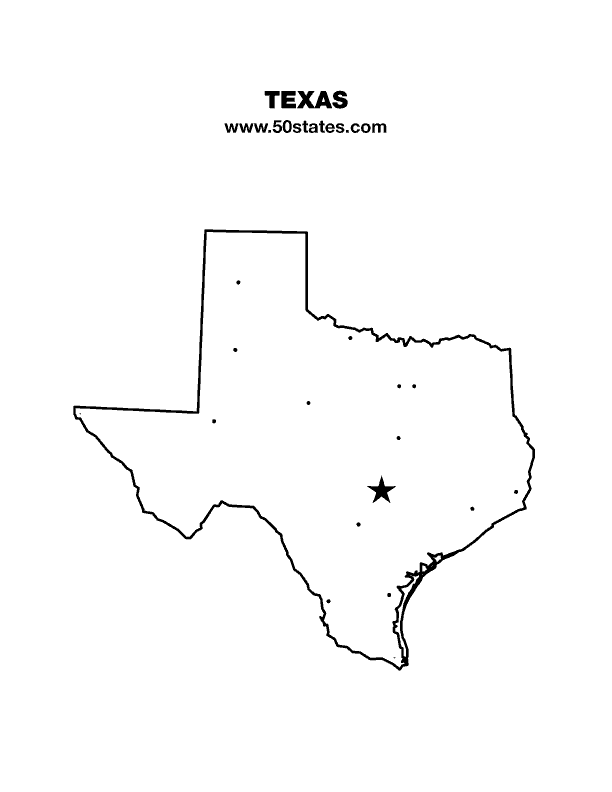
**Methods for Estimating Areas**

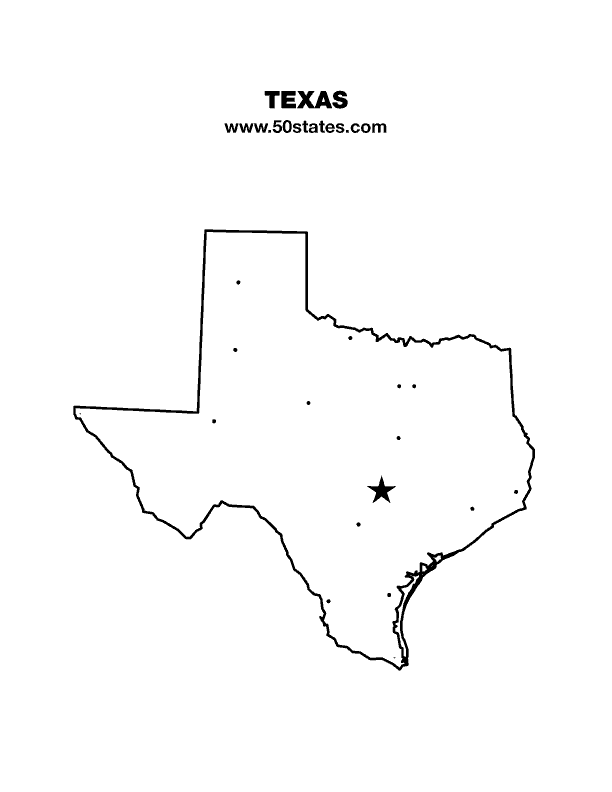
**These are two methods for estimating the area of an irregular shape:**

1. **Break the irregular shape into simple shapes such as rectangles, triangles, and circles. Find these areas & sum them up to estimate the entire area.**

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**Notice that the simple shapes don’t fit perfectly inside the irregular shape, but by over estimating in some areas & underestimating in other areas we can get pretty close. We can get even closer to estimating the true area by adding smaller shapes in the areas that are not covered.**

1. **Using a grid where each square represents one square-unit (such as 1 meter2), count the number of squares contained in your shape. As you can see, in many cases only part of a square lies inside your shape. As we did in the first method, if you overestimate by counting the squares that are *mostly* inside & at the same time underestimate by excluding the squares where only a small area is inside your estimate of the area should be close!**

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