

# Scale Drawings

The scale (1 inch = 170 miles) for the Texas map is a ratio that compares the map distance to the actual distance.

**1 inch** on the map = **170 actual miles**.

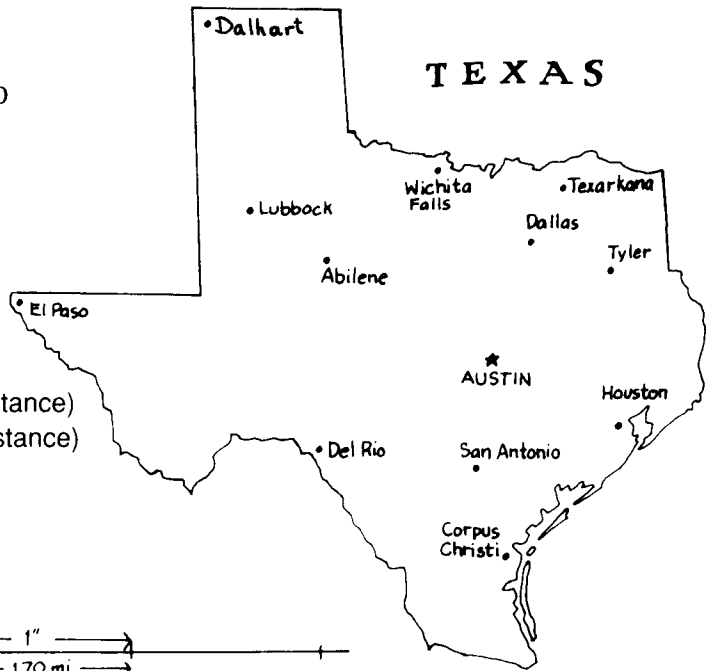
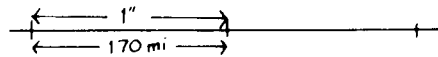
The distance on the map between Dalhart and Houston is 3 inches. To find the actual distance in miles, set up a proportion.

$$\frac{1}{170} \text{ inch (map distance)} = \frac{3}{n} \text{ inches (map distance)}$$

$$1 \times n = 3 \times 170$$

$$n = 510$$

The actual distance is 510 miles.



Set up proportions and solve. The map distances are given.

1. Find the actual distance between El Paso and San Antonio. The map distance is 2.5 inches.

$$\frac{1}{170} \text{ inch (map)} = \frac{2.5}{n} \text{ inches (map)}$$

The actual distance between El Paso and San Antonio is \_\_\_\_\_ miles.

3. Find the actual distance between Wichita Falls and Corpus Christi. The map distance is 2 inches.

$$\frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}} = \frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}}$$

The actual distance between Wichita Falls and Corpus Christi is \_\_\_\_\_ miles.

2. Find the actual distance between Lubbock and Dallas. The map distance is 1.5 inches.

$$\frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}} = \frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}}$$

The actual distance between Lubbock and Dallas is \_\_\_\_\_ miles.

4. Find the actual distance between Texarkana and Tyler. The map distance is .5 of an inch.

$$\frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}} = \frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}}$$

The actual distance between Texarkana and Tyler is \_\_\_\_\_ miles.