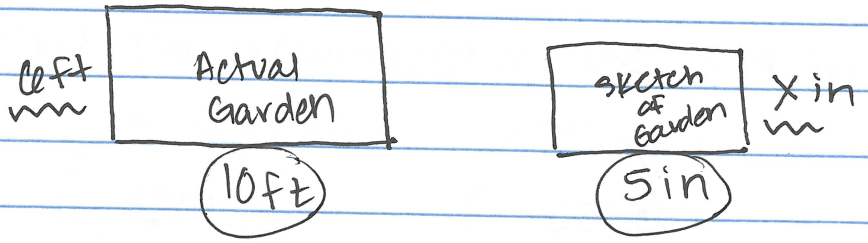
Scale Drawings

* Your ratio can have the same units or different units

~~Ex.~~



$$\frac{10\text{ ft}}{5\text{ in}} = \frac{6\text{ ft}}{X\text{ in}}$$

$$\frac{30}{10} = \frac{10X}{10}$$

$$3\text{ in} = X$$

Ex. A map has a scale of 2 in : 3 mi
Mt. Hood
Distance on a map to from Alan's home is 16 in. What is the actual distance.

$$\frac{2\text{ in}}{3\text{ mi}} = \frac{16\text{ in}}{X\text{ mi}}$$

$$\frac{2X}{2} = \frac{48}{2}$$

$$X = 24 \text{ miles}$$