1.6 More Equations and Applications

* Solving Radical Equations and Equations with Rational Exponents

Ex. For a dropped object, the formula $t = \sqrt{\frac{h}{16}}$ can be used to find the distance, *h*,

in feet, that the object has fallen after a time, *t*, in seconds. How far has the object fallen after 1.6 seconds?

Ex. (#126) A tomato plant is purchased at garden supply store. The initial height of the plant is 25.4 in. The height of the plant *h* (in inches) is approximately by $h = 16(t+4)^{\frac{1}{3}}$, where *t* is the time in days after planting.

a. Determine the height of the plant 14 days after planting. Round to the nearest inch.

b. How long after the plant is planted will it take for the height to reach 5 ft? Round to the nearest day.