Ch 3.5 Polynomial Applications:

Use a let statement or draw a diagram with sides labeled. Try and find relations between variables before setting up the equation.

Examples

1. A box is constructed such that the length is three times the width and the height is 3 cm longer than the width, with a volume of 600 cm^3. What are the dimensions of the box?

2. An open rectangular box is constructed by cutting a square of length *x* from each corner of a 20 cm by 30 cm rectangular piece of cardboard, then folding up the sides. What is the length of the square that must be cut from each corner if the volume is 1008 cm^3?

3. The product of three consecutive odd integers is 105. What are the numbers?