

Toy Box Building

You work for a company that builds custom toy boxes. Your customers decide the overall dimensions (in inches), and your woodworkers build the toy box.

Your job is to figure out how much each custom toy box costs. Toy box price is based upon the materials used.

Hinges: \$1.50 each

Rope: \$1.00 each

One toy box consists of the following components:

- 1 hinge for every foot of length
- 1 Rope to hold the toy box top
- 1 Top, a length X depth piece of wood
- 1 Bottom, a $(\text{length} - 1) \times (\text{depth} - 1)$ piece of wood
- 2 Sides, each a $(\text{depth} - 1) \times (\text{height} - 1)$ piece of wood
- 1 Front, a length X $(\text{height} - 1)$ piece of wood
- 1 Back, identical to the front