

Volume of rectangular prisms (customary units)

Grade 5 Word Problems Worksheet

1. Arlene has been keeping her money in a box for 6 years. This box is 8 inches long, 5.2 inches wide and 3 inches tall. What is the volume of the money box?

2. Joseph dug soil for 10 rectangular planting pits. Each planting pit is 3 inches long, 2 inches wide and 3 inches deep. What is the volume of the soil removed from each planting pit?

3. The private swimming pool is 23 ft long, 14 ft wide and 10 ft deep. When Ariel filled it with water up to 6 ft deep, what was the volume of the water she used to fill the swimming pool to that depth?



Answers

- $8 \times 5.2 \times 3 = 124.8$
The volume of the money box is 124.8 cubic inches.
- $3 \times 2 \times 3 = 18$
The volume of soil removed in each planting pit is 18 cubic inches.
- $23 \times 14 \times 6 = 1,932$
The volume of water needed is 1,932 cubic feet.
- $18 \times 10 \times 8 = 1,440$
 $1,750 - 1,440 = 310$
310 cubic inches of water overflows from the sink.
- $6.5 \times 3 \times 4 = 78$ cubic feet
 $78 - 12 = 66$
There are 66 cubic feet of space left in the freezer.