## Volume of rectangular prisms (customary units)

1. Arlene has been keeping her money in a box for 6 years. This box is 8 inch long, 5.2 inch 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 inch long, 2 inch wide and 3 inch 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?

4. Jordan put a drain stopper in a rectangular sink which is 18 inch long, 10 inch wide and 8 inches deep. He left the water faucet open for 10 minutes and released 1,750 cubic inches of water. How much water overflows from the sink?
5. Kier bought a big chest freezer measuring 6.5 ft long, 3 ft wide and 4 ft deep inside. He puts ice cream containers with a total volume of 12 cubic feet in the chest freezer. How much available space is left in the chest freezer?

## Answers

1. $8 \times 5.2 \times 3=124.8$

The volume of the money box is 124.8 cubic inches.
2. $2 \times 3 \times 2=12$

The volume of soil removed in each planting pit is 12 cubic inches.
3. $23 \times 14 \times(10-6)=23 \times 14 \times 4=1,288$

The volume of water needed is 1,288 cubic feet.
4. $18 \times 10 \times 8=1,440$
$1,750-1,440=310$
310 cubic inches of water overflows from the sink.
5. $6.5 \times 3 \times 4=78$ cubic feet
$78-12=66$
There are 66 cubic feet of space left in the freezer.

