3.

a. A rectangular container that has a length of 30 cm, a width of 20 cm, and a height of 24 cm. Calculate the volume and label in cubic units.

Volume of container

$30 \times 20 \times 24 = 720 \times 20 = 14{,}400\ cm^3$

b. The rectangular container from Part A is filled with water to a depth of 15 cm. When an additional 6.5 liters of water is poured into the container, some water overflows. How many liters of water overflow the container? Use words, pictures, and numbers to explain your answer. **(Remember 1 cm^3 = 1 mL.)**

Volume of water: $30 \times 20 \times 15 = 450 \times 20 = 9000\ cm^3$

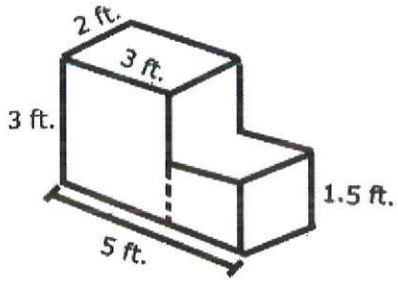
$14{,}400 - 9000 = 5{,}400$

$5{,}400\ cm^3$ left, or 5.4 L

$6.5\ L - 5.4\ L = 1.1\ L$

1.1 L overflow

4. Calculate the volume and label in cubic units. Write and explain your work using equations



$3 \times 3 \times 2 = 18\ ft^3$

$2 \times 1.5 \times 2 = 6\ ft^3$

$24\ ft^3$