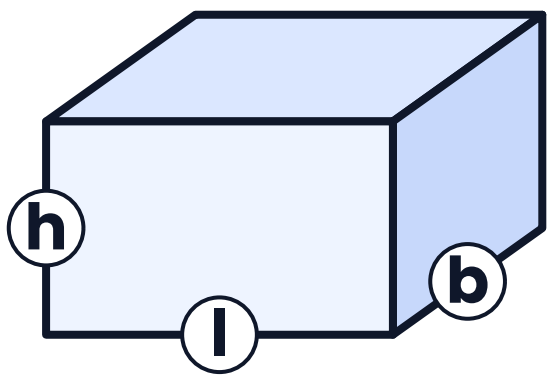
Rumfang

kasse, cylinder, kegle og kugle

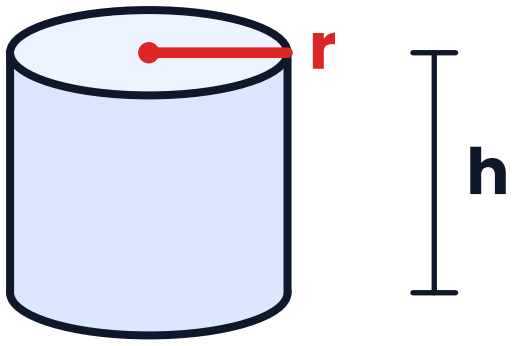
Rumfang er, hvor meget en figur fylder. Det måles fx i cm³ (kubikcentimeter), m³ eller liter.

Kasse



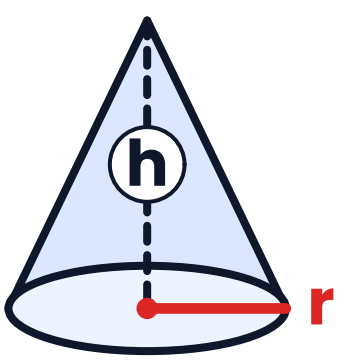
$$V = l \cdot b \cdot h$$

Cylinder



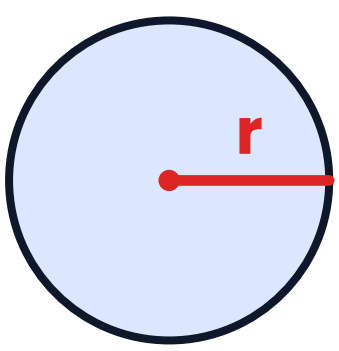
$$V = \pi \cdot r^2 \cdot h$$

Kegle



$$V = 1/3 \cdot \pi \cdot r^2 \cdot h$$

Kugle



$$V = 4/3 \cdot \pi \cdot r^3$$

Eksempel: cylinder med r = 3 cm og h = 5 cm

$$V = \pi \cdot r^2 \cdot h = \pi \cdot 3^2 \cdot 5 = \pi \cdot 45 \approx 141{,}4\ \text{cm}^3$$

Pas på!

- ✗ Kegle: $V = \pi \cdot 3^2 \cdot 5 \approx 141{,}4\ \text{cm}^3$
- ✓ **Kegle: $V = 1/3 \cdot \pi \cdot 3^2 \cdot 5 \approx 47{,}1\ \text{cm}^3$**
  Keglen fylder en tredjedel af cylinderen.