

Læringsmål for i dag

- kunne lage boxplots
- forstår variabler
- forstår forskjellen mellom noen datatyper
- kunne bruke python for enkle beregninger

Maximum heart rate rule-of-thumb

$$\text{HR}_{\text{max}} = 220 - \text{age}$$

The target heart rate for a specific intensity

multiply the maximum heart rate with the given intensity

$$\text{HR}_{\text{target}} = \text{HR}_{\text{max}} \times \text{intensity} = (220 - \text{age}) \times \text{intensity}$$

The pH value of a solution is defined as the negative concentration of H^+ ions,

$$\text{pH} = -\log_{10}[\text{H}^+],$$

where

- $[\text{H}^+]$ is the concentration of H^+ ions in moles per liter (molarity)
- \log_{10} is the logarithm in base 10.

$$x = b^p$$

When you know x and b , how to find p ?

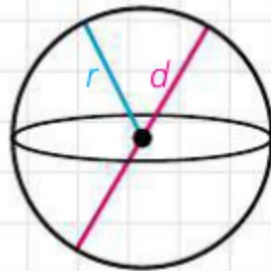
$$x = b^p$$

When you know x and b , how to find p ?

$$p = \log_b(x)$$

The shape of a yeast cell can be approximated by a sphere. (a) Calculate the volume of each cell using the formula for the volume of a sphere:

$$V = \frac{4}{3} \pi r^3$$



Note that π (the Greek letter pi) is a constant with an approximate value of 3.14, d stands for diameter, and r stands for radius, which is half the diameter. (b) How much new cytoplasm will the new cell have to synthesize as it matures? To determine this, calculate the difference between the volume of the full-sized cell and the volume of the new cell.