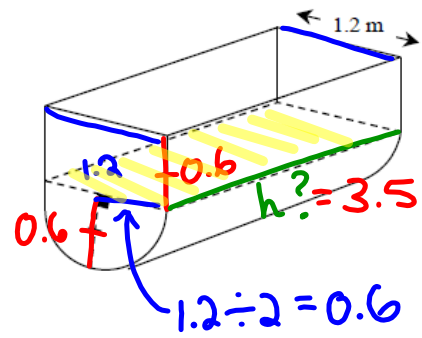


- Hand in your homework
- Work period today: you may listen to music while you WORK INDIVIDUALLY
- At 11:45, you may consult with a partner
- At 12:00 - selected solutions
- Quiz tomorrow!

7.10
unicorn 19

The lower portion of the tank is a half-cylinder, while the upper portion is a right prism. Both sections have the same height.
 The lower portion of the tank can hold 1.98 m^3 of maple sap.
 What volume of sap can the tank hold when full?



$\frac{1}{2}$ cylinder
 Prism:
 $V = A \cdot h$
 $= 1.2 \times 0.6 \times 3.5$
 $= 2.52 \text{ m}^3$

$V = 1.98 \text{ m}^3$
 $V = \frac{\pi r^2 \cdot h}{2}$

$1.98 = \frac{3.14 \cdot (0.6)^2 \cdot x}{2}$ → 0.5652

$1.98 = 0.5652 \cdot x$
 $3.5 = x$ 😊
 height of tank

TOTAL:
 $1.98 + 2.52 = 4.5 \text{ m}^3$