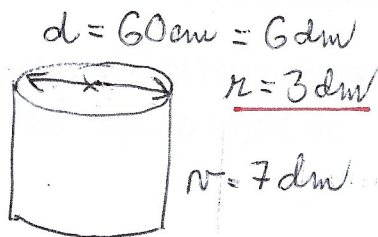


# vallec - cvičení 3 - řešení

1.



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

$$V = 3,14 \cdot 9 \cdot 7$$

$$V = 3,14 \cdot 63$$

$$V = 197,82 \text{ dm}^3$$

$$S = 2\pi r^2 + 2\pi r v$$

$$S = 6,28 \cdot 9 + 6,28 \cdot 3 \cdot 7$$

$$S = 6,28 \cdot 9 + 6,28 \cdot 21$$

$$S = 56,52 + 131,88$$

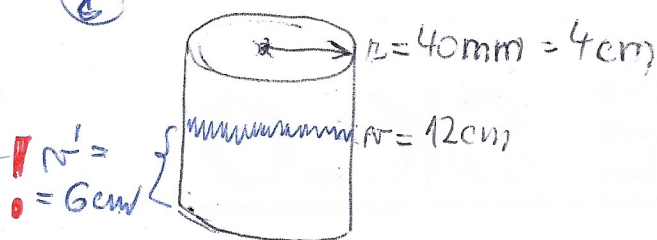
$$S = 188,4 \text{ dm}^2$$

$$\begin{array}{r} 6,28 \\ \cdot 9 \\ \hline 56,52 \end{array}$$

$$\begin{array}{r} 6,28 \\ \cdot 21 \\ \hline 131,88 \end{array}$$

$$\begin{array}{r} 56,52 \\ + 131,88 \\ \hline 188,40 \end{array}$$

2.



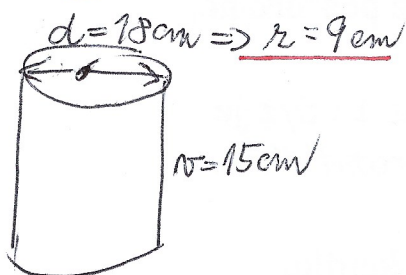
$$V = \pi \cdot r^2 \cdot v'$$

$$V = 3,14 \cdot 16 \cdot 6$$

$$V = 301,44 \text{ cm}^3$$

$v$  krmku je 301,44 ml čaje.

3.



$$S = \pi r^2 + 2\pi r v$$

$$S = 3,14 \cdot 81 + 6,28 \cdot 9 \cdot 15$$

$$S = 254,34 + 847,8$$

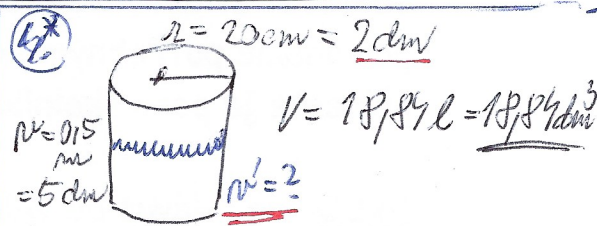
$$S = 1102,14 \text{ cm}^2$$

$$\begin{array}{r} 3,14 \\ \cdot 81 \\ \hline 257,2 \\ 254,34 \\ \hline 257,2 \\ \cdot 9 \\ \hline 2285,16 \\ 254,34 \\ \hline 257,2 \\ \cdot 15 \\ \hline 3859,5 \\ 254,34 \\ \hline 3859,5 \\ + 254,34 \\ \hline 4113,84 \end{array}$$

$$110\% = 1102,14 \cdot 1,1 = 1212,354$$

Na vyřobu konzervy je třeba 1212,354 cm<sup>2</sup> plechu.

4.



$$V = \pi r^2 \cdot v'$$

$$18,84 = 3,14 \cdot 4 \cdot v'$$

$$18,84 = 12,56 \cdot v'$$

$$v' = 18,84 : 12,56$$

$$v' = 1,5 \text{ dm}$$

$18,84 : 12,56 = 1,5$   
 06280  
 0000  
 Voda ve sklenici byla do výšky 1,5 dm.