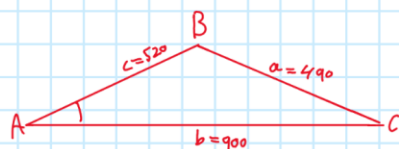


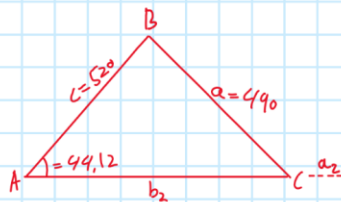
	Navn:		Skole:	
	Klasse: 20		Dato: 9. marts 2021	Fag: Matematik A

## Opgave 128



$$\begin{aligned}
 A &= \cos^{-1} \left( \frac{b^2 + c^2 - a^2}{2bc} \right) \\
 &= \cos^{-1} \left( \frac{900^2 + 520^2 - 490^2}{2 \cdot 900 \cdot 520} \right) && \text{indsæt tal} \\
 &= \cos^{-1} \left( \frac{810000 + 270400 - 240100}{936000} \right) && \text{udregn} \\
 &= \cos^{-1} \left( \frac{840300}{936000} \right) && \text{lys} \\
 &= \cos^{-1}(0,897) \\
 &= 26,14
 \end{aligned}$$

$$\begin{aligned}
 a_2 &= b - b_2 \\
 &= 900 - 703,6 \\
 &= 196,4
 \end{aligned}$$



$$\begin{aligned}
 C &= \sin^{-1} \left( \frac{c \cdot \sin(A)}{a} \right) \\
 &= \sin^{-1} \left( \frac{520 \cdot \sin(44,12)}{490} \right) && \text{indsæt tal} \\
 &= \sin^{-1} \left( \frac{362}{490} \right) && \text{tæller} \\
 &= \sin^{-1}(0,73) && \text{brøk} \\
 &= 47,62 && \text{sin}^{-1}
 \end{aligned}$$

$$\begin{aligned}
 B &= 180 - A - C \\
 &= 180 - 44,12 - 47,62 && \text{indsæt tal} \\
 &= 88,26 && \text{minus}
 \end{aligned}$$

$$\begin{aligned}
 b_2 &= \sqrt{a^2 + c^2 - 2ac \cos(B)} \\
 &= \sqrt{490^2 + 520^2 - 2 \cdot 490 \cdot 520 \cdot \cos(88,26)} && \text{indsæt tal} \\
 &= \sqrt{490^2 + 520^2 - 15473,52} && \text{Reducer} \\
 &= \sqrt{240100 + 270400 - 15473,52} && \text{Potens} \\
 &= \sqrt{495026,48} && \text{udregn} \\
 &= 703,6
 \end{aligned}$$