

PITAGOROV IZREK - REŠITVE

1. a) $p = 13 \text{ cm}$
 $k_1 = 12 \text{ cm}$
 $k_2 =$

$$k_2^2 = p^2 - k_1^2$$

$$k_2^2 = 13^2 - 12^2$$

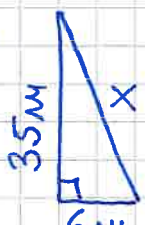
$$k_2^2 = 169 - 144 = 25$$

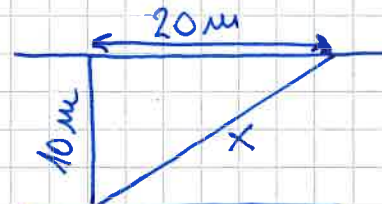
$$k_2 = 5 \text{ cm}$$

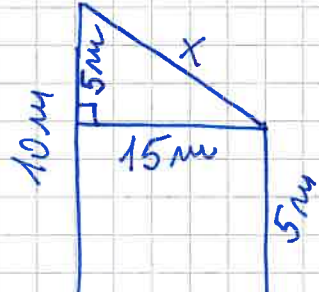
b) $6^2 + 8^2 = 10^2$
 $36 + 64 = 100 \checkmark$
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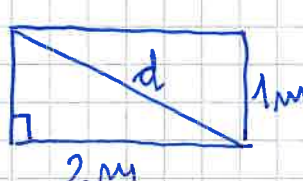
2. a) $M^2 = p^2 + m^2$
 $M^2 = 49 + 576 = 625$
 $M = 25 \text{ cm}$

b) $x^2 = a^2 - y^2$
 $x^2 = (2\sqrt{3})^2 - \sqrt{2}^2$
 $x^2 = 4 \cdot 3 - 2 = 10$
 $x = \sqrt{10} \text{ cm}$

3.  $x^2 = 35^2 + 6^2$
 $x^2 = 1225 + 36 = 1261$
 $x = \sqrt{1261} \approx 35,51 \text{ m}$

4.  $x^2 = 10^2 + 20^2$
 $x^2 = 100 + 400 = 500$
 $x = \sqrt{500} = \sqrt{5 \cdot 100} = 10\sqrt{5} \text{ m} \approx 22,36 \text{ m}$

5.  $x^2 = 5^2 + 15^2$
 $x^2 = 25 + 225 = 250$
 $x = \sqrt{250} = \sqrt{25 \cdot 10} = 5\sqrt{10} \text{ m} \approx 15,81 \text{ m}$

6.  $d^2 = 2^2 + 1^2$
 $d^2 = 4 + 1 = 5$
 $d = \sqrt{5} \approx 2,23 \text{ m} > 2,10 \text{ m}$

Čaklo leži iztegnjeno po diagonali.

7. $x^2 = 1,5^2 + 4^2 = 2,25 + 16 = 18,25$
 $x = \sqrt{18,25} \approx 4,27 \text{ m}$

8. a) $x^2 = 17^2 - 8^2 = 289 - 64 = 225$
 $x = 15 \text{ cm}$
 $p = 12 \cdot 15 = 180 \text{ cm}^2$

b) $\left(\frac{x}{2}\right)^2 = 10^2 - 8^2 = 100 - 64 = 36$
 $\frac{x}{2} = \sqrt{36} = 6$
 $x = 12 \text{ cm}$