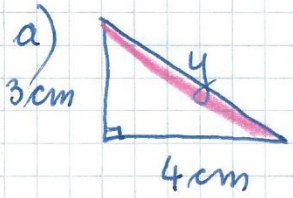
4. URA - RAČUNANJE KATETE - REŠITVE

V str. 182/2

a)



$y^2 = 3^2 + 4^2$

$y^2 = 9 + 16$

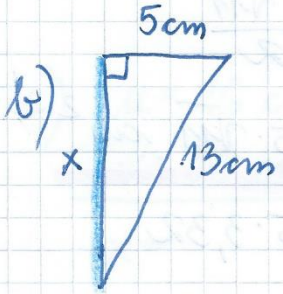
$y^2 = 25$

$y = \sqrt{25}$

$y = 5\ cm$

RAČUNAM HIPOTENUZO.

b)



$x^2 = 13^2 - 5^2$

$x^2 = 169 - 25$

$x^2 = 144$

$x = \sqrt{144}$

$x = 12\ cm$

RAČUNAM KATETO.

V str. 182/4

a) $c = 17\ cm$

$a = 8\ cm$

$x =$

$x^2 = c^2 - a^2$

$x^2 = 17^2 - 8^2$

$x^2 = 289 - 64$

$x^2 = 225$

$x = \sqrt{225}$

$x = 15\ cm$

$o = a + c + x$

$o = 8 + 17 + 15$

$o = 40\ cm$

$p = \frac{a \cdot x}{2}$

$p = \frac{8 \cdot 15}{2}$

$p = 60\ cm^2$

b) $s = 101\,cm$

$r = 99\,cm$

$x =$

$x^2 = s^2 - r^2$

$x^2 = 101^2 - 99^2$

$x^2 = 10201 - 9801$

$x^2 = 400$

$x = \sqrt{400}$

$x = 20\,cm$

$o = s + r + x$

$o = 101 + 99 + 20$

$o = 220\,cm$

$p = \frac{r \cdot x}{2}$

$p = \frac{99 \cdot 20}{2}$

$p = 990\,cm^2$

c) $t = 37\,dm$

$u = 12\,dm$

$x =$

$x^2 = t^2 - u^2$

$x^2 = 37^2 - 12^2$

$x^2 = 1369 - 144$

$x^2 = 1225$

$x = \sqrt{1225}$

$x = 35\,dm$

$o = t + u + x$

$o = 37 + 12 + 35$

$o = 84\,dm$

$p = \frac{u \cdot x}{2}$

$p = \frac{12 \cdot 35}{2}$

$p = 210\,dm^2$

c) $m = 7,3\ m$

$n = 5,5\ m$

$x =$

$x^2 = m^2 - n^2$

$x^2 = 7,3^2 - 5,5^2$

$x^2 = 53,29 - 30,25$

$x^2 = 23,04$

$x = \sqrt{23,04}$

$x = 4,8\ m$

$o = m + n + x$

$o = 7,3 + 5,5 + 4,8$

$o = 17,6\ m$

$p = \frac{n \cdot x}{2}$

$p = \frac{5,5 \cdot 4,8}{2}$

$p = 13,2\ m^2$

d) $x = \sqrt{13}\ cm$

$y = 2\ cm$

$k =$

$k^2 = x^2 - y^2$

$k^2 = (\sqrt{13})^2 - 2^2$

$k^2 = 13 - 4$

$k^2 = 9$

$k = \sqrt{9}$

$k = 3\ cm$

$p = \frac{y \cdot k}{2}$

$p = \frac{2 \cdot 3}{2}$

$p = 3\ cm^2$

$o = x + y + k$

$o = \sqrt{3} + 2 + 3$

$o = (5 + \sqrt{3})\ cm$

$o \doteq 5 + 1,73$

$o \doteq 6,73\ cm$

e) $h = \sqrt{10}\ m$

$k = 2\sqrt{2}\ m$

$x =$

$x^2 = h^2 - k^2$

$x^2 = (\sqrt{10})^2 - (2\sqrt{2})^2$

$x^2 = 10 - 4 \cdot 2$

$x^2 = 10 - 8$

$x^2 = 2$

$x = \sqrt{2}\ m$

$o = h + k + x$

$o = \sqrt{10} + 2\sqrt{2} + \sqrt{2}$

$o = (\sqrt{10} + 3\sqrt{2})\ m$

$o \doteq 3{,}16 + 3 \cdot 1{,}41$

$o \doteq 7{,}39\ m$

$p = \frac{k \cdot x}{2}$

$p = \frac{2\sqrt{2} \cdot \sqrt{2}}{2}$

$p = \frac{2 \cdot 2}{2}$

$p = 2\ m^2$