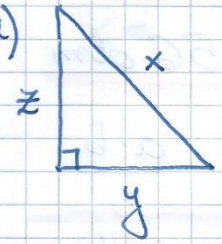
3. URA – RAČUNANJE V PRAVOKOTNEM TRIKOTNIKU - REŠITVE

U str. 182/1

a)

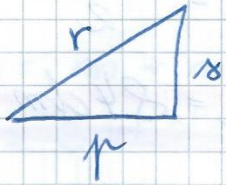


$x^2 = z^2 + y^2$

x = HIPOTENUZA

z, y = KATETI

b)

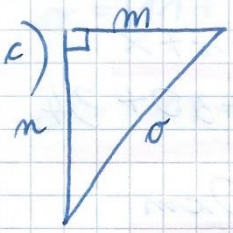


$r^2 = s^2 + p^2$

r = HIPOTENUZA

s, p = KATETI

c)

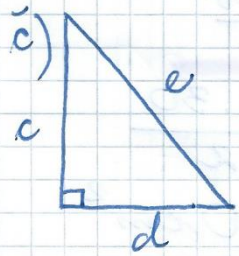


$o^2 = n^2 + m^2$

o = HIPOTENUZA

n, m = KATETI

č)



$e^2 = c^2 + d^2$

e = HIPOTENUZA

c, d = KATETI

U str. 182/3

a) $t = 6\ cm$

$m = 8\ cm$

$x = ?$

$x^2 = t^2 + m^2$

$x^2 = 6^2 + 8^2$

$x^2 = 36 + 64$

$x^2 = 100$

$x = \sqrt{100}$

$x = 10\ cm$

$o = x + t + m$

$o = 10 + 6 + 8$

$o = 24\ cm$

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

$p = \frac{6 \cdot 8}{2} = 24\ cm^2$

b) $a = 7\,dm$

$b = 24\,dm$

$x =$

$x^2 = a^2 + b^2$

$x^2 = 7^2 + 24^2$

$x^2 = 49 + 576$

$x^2 = 625$

$x = \sqrt{625}$

$x = 25\,dm$

$o = a + b + x$

$o = 7 + 24 + 25$

$o = 56\,dm$

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

$p = \frac{7 \cdot 24}{2}$

$p = 84\,dm^2$

c) $u = 16\,cm$

$v = 30\,cm$

$x =$

$x^2 = u^2 + v^2$

$x^2 = 16^2 + 30^2$

$x^2 = 256 + 900$

$x^2 = 1156$

$x = \sqrt{1156}$

$x = 34\,cm$

$o = u + v + x$

$o = 16 + 30 + 34$

$o = 80\,cm$

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

$p = \frac{16 \cdot 30}{2}$

$p = 240\,cm^2$

č) $x = 2\,dm = 20\,cm$

$y = 21\,cm$

$z =$

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

$p = \frac{20 \cdot 21}{2}$

$p = 210\,cm^2$

$z^2 = x^2 + y^2$

$z^2 = 20^2 + 21^2$

$z^2 = 400 + 441$

$z^2 = 841$

$z = \sqrt{841}$

$z = 29\,cm$

$o = x + y + z$

$o = 20 + 21 + 29$

$o = 70\,cm$

d) $m = 5\ cm$

$n = \sqrt{11}\ cm$

$x =$

$x^2 = m^2 + n^2$

$x^2 = 5^2 + (\sqrt{11})^2$

$x^2 = 25 + 11$

$x^2 = 36$

$x = \sqrt{36}$

$x = 6\ cm$

$o = m + n + x$

$o = 5 + \sqrt{11} + 6$

$o = (11 + \sqrt{11})\ cm$

$o \doteq 11 + 3{,}32 \doteq 14{,}32\ cm$

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

$p = \frac{5 \cdot \sqrt{11}}{2}$

$p = 2{,}5 \cdot \sqrt{11}\ cm^2$

$p \doteq 2{,}5 \cdot 3{,}32$

$p \doteq 8{,}3\ cm^2$