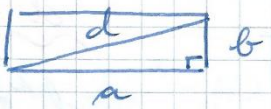
1. URA – PITAGOROV IZREK V PRAVOKOTNIKU – REŠITVE

U str. 186/1



a) $a = 12\ cm$
$b = 9\ cm$
$d =$

$d^2 = a^2 + b^2$
$d^2 = 12^2 + 9^2$
$d^2 = 144 + 81$
$d^2 = 225$
$d = \sqrt{225}$
$d = 15\ cm$

b) $a = 15\ cm$
$b = 8\ cm$
$d =$

$d^2 = a^2 + b^2$
$d^2 = 15^2 + 8^2$
$d^2 = 225 + 64$
$d^2 = 289$
$d = \sqrt{289}$
$d = 17\ cm$

c) $a = 1,1\ dm$
$b = 6\ dm$
$d =$

$d^2 = a^2 + b^2$
$d^2 = 1,1^2 + 6^2$
$d^2 = 1,21 + 36$
$d^2 = 37,21$
$d = \sqrt{37,21}$
$d = 6,1\ dm$

c) $a = 8\,dm = 80\,cm$

$b = 39\,cm$

$d =$

$d^2 = a^2 + b^2$

$d^2 = 80^2 + 39^2$

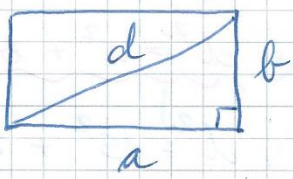
$d^2 = 6400 + 1521$

$d^2 = 7921$

$d = \sqrt{7921}$

$d = 89\,cm = 8{,}9\,dm$

U zb. 186/3



a) $b = 3\,cm$

$d = 5\,cm$

$a =$

$o =$

$p =$

$a^2 = d^2 - b^2$

$a^2 = 5^2 - 3^2$

$a^2 = 25 - 9$

$a^2 = 16$

$a = \sqrt{16}$

$a = 4\,cm$

$o = 2 \cdot a + 2 \cdot b$

$o = 2 \cdot 4 + 2 \cdot 3$

$o = 8 + 6$

$o = 14\,cm$

$p = a \cdot b$

$p = 4 \cdot 3$

$p = 12\,cm^2$

b) $a = 10\,cm$
$d = 26\,cm$
$b =$
$o =$
$p =$

$b^2 = d^2 - a^2$
$b^2 = 26^2 - 10^2$
$b^2 = 676 - 100$
$b^2 = 576$
$b = \sqrt{576}$
$b = 24\,cm$

$o = 2 \cdot a + 2 \cdot b$
$o = 2 \cdot 10 + 2 \cdot 24$
$o = 20 + 48$
$o = 68\,cm$

$p = a \cdot b$
$p = 10 \cdot 24$
$p = 240\,cm^2$

c) $a = 30\,cm$
$d = 34\,cm$
$b =$
$o =$
$p =$

$b^2 = d^2 - a^2$
$b^2 = 34^2 - 30^2$
$b^2 = 1156 - 900$
$b^2 = 256$
$b = \sqrt{256}$
$b = 16\,cm$

$o = 2 \cdot a + 2 \cdot b$
$o = 2 \cdot 30 + 2 \cdot 16$
$o = 60 + 32$
$o = 92\,cm$

$p = a \cdot b$
$p = 30 \cdot 16$
$p = 480\,cm^2$

c) $b = 12\ cm$

$d = 3{,}7\ dm = 37\ cm$

$a =$

$o =$

$p =$

$a^2 = d^2 - b^2$

$a^2 = 37^2 - 12^2$

$a^2 = 1369 - 144$

$a^2 = 1225$

$a = \sqrt{1225}$

$a = 35\ cm$

$o = 2 \cdot a + 2 \cdot b$

$o = 2 \cdot 35 + 2 \cdot 12$

$o = 70 + 24$

$o = 94\ cm = 9{,}4\ dm$

$p = a \cdot b$

$p = 35 \cdot 12$

$p = 420\ cm^2 = 4{,}2\ dm^2$

d) $d = \sqrt{74}\ cm$

$a = 5\ cm$

$b =$

$o =$

$p =$

$b^2 = d^2 - a^2$

$b^2 = \sqrt{74}^2 - 5^2$

$b^2 = 74 - 25$

$b^2 = 49$

$b = \sqrt{49}$

$b = 7\ cm$

$o = 2 \cdot a + 2 \cdot b$

$o = 2 \cdot 5 + 2 \cdot 7$

$o = 10 + 14$

$o = 24\ cm$

$p = a \cdot b$

$p = 5 \cdot 7$

$p = 35\ cm^2$