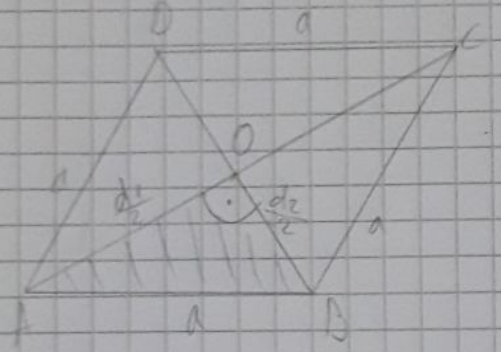
Примена на ромб 16.11.2020



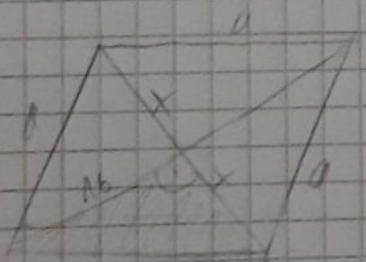
$AC = d_1$
$BD = d_2$

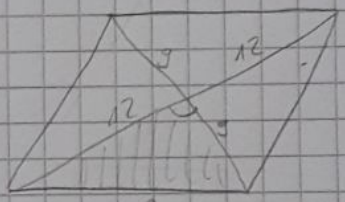
$d_1 \perp d_2$
$AO = \frac{d_1}{2}$
$BO = \frac{d_2}{2}$

Дијагонале ромба међусобно су нормалне и полове се. Посм. правоугли $\triangle AOB$:
катете: $\frac{d_1}{2}, \frac{d_2}{2}$
хип.: a
$a^2 = \left(\frac{d_1}{2}\right)^2 + \left(\frac{d_2}{2}\right)^2$
$P = a \cdot ha$ или $P = \frac{d_1 d_2}{2}$ (паралелограм)
$O = 4a$

328. а) $d_1 = 18\,cm$
$d_2 = 24\,cm$
$a = ?$ $O = ?$

$a^2 = 12^2 + 9^2$
$a^2 = 144 + 81$
$a^2 = 225$
$a = \sqrt{225}$
$a = 15\,cm$
$O = 4a$
$O = 15 \cdot 4$
$O = 60\,cm$





331. а) $d_1 = 32\,cm$
$O = 80\,cm$
$d_2 = ?$ $P = ?$ $h = ?$

$a = O : 4$
$a = 20\,cm$
$x = \frac{d_2}{2}$
$20^2 = 16^2 + x^2$
$400 = 256 + x^2$
$x^2 = 144$
$x = 12 \rightarrow d_2 = 24$
$P = \frac{d_1 \cdot d_2}{2}$
$P = \frac{16 \cdot 24}{2}$
$P =$

Урадити: 328. б), 331. б)