Mavzu: Rombning yuzi

B C

A D
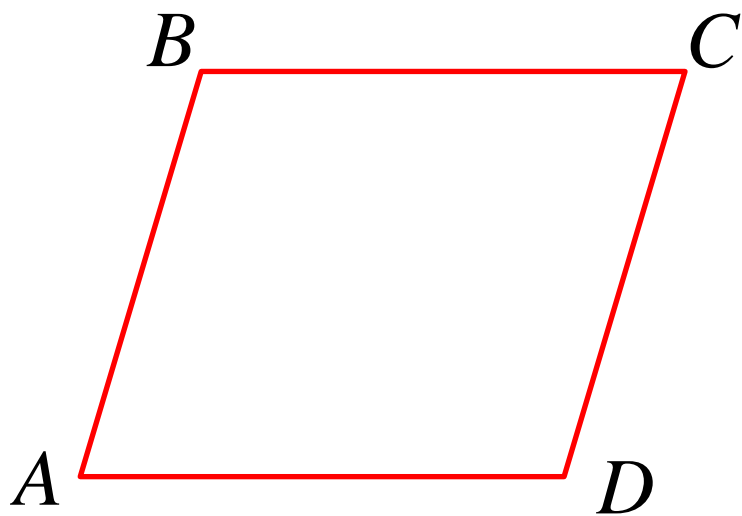
Ta'rif : Tomonlari teng bo'lgan parallellogram **romb** deyiladi

Xossalari

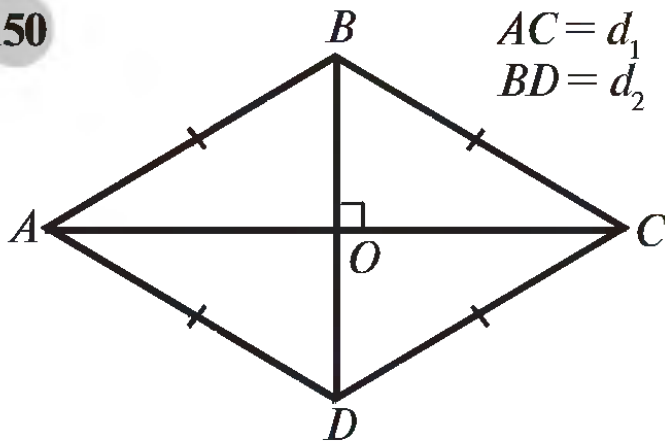>> Rombning diogonallari o'zaro perpendikulyar.

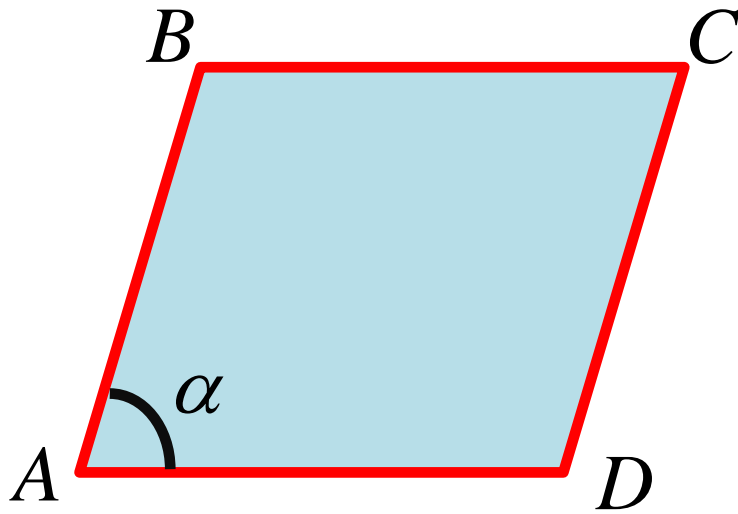>> Rombning dioganali uning burchagini teng ikkiga bo'ladi.
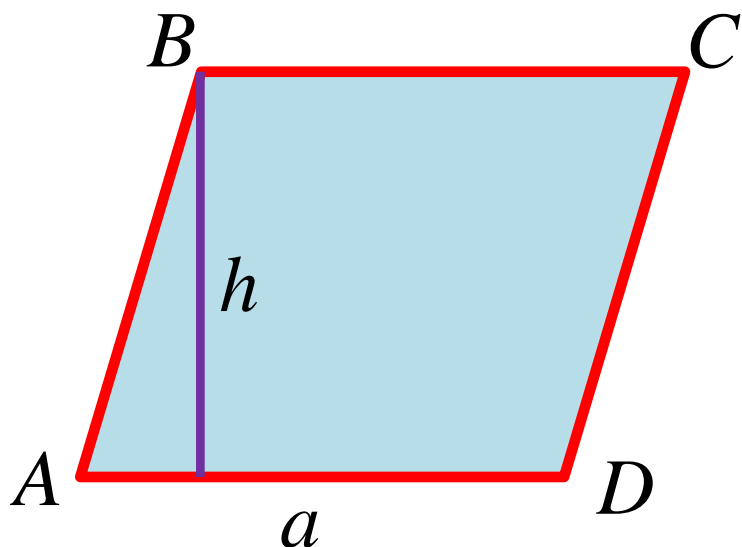
150

$AC = d_1$
$BD = d_2$

$$S = \frac{1}{2} d_1 \cdot d_2$$

α

$$S = a^2 \cdot \sin \alpha$$

$$S = 2a \cdot r$$

$$d_1^2 + d_2^2 = 4a^2$$

r - Ichki chizilgan aylana radiusi

$$S = ah$$

1-masala. ABCD rombning tomoni 20 sm ga, o'tkir burchagi esa 30^0 ga teng. Shu rombning yuzini toping.

2-masala. Rombning dioganallaridan biri ikkinchisidan 1,5 marta katta, rombning yuzi esa 27 sm^2 ga teng. Shu rombning dioganallarini toping.

Masalalar

1. Rombning tomoni 6 sm ga, yuzi esa 18 sm^2 ga teng. Shu rombning katta burchagini toping.
2. Rombning burchaklarining nisbati 1:5 ga, tomoni esa a ga teng. Shu rombning yuzini toping.
3. Rombning tomoni 8 sm ga, o'tkir burchagi 30^0 ga teng. Shu rombning dioganallari ko'paytmasini toping.
4. Rombning diagonallari 3 : 4 kabi nisbatda, yuzi esa 384 ga teng. Uning tomonini toping.
5. Rombning diagonali tomoni bilan 25^0 li burchak tashkil qiladi. Rombning katta burchagini toping.
6. Rombning yuzi 24 ga, diagonallaridan biri 6 ga teng. Uning tomonini toping.
7. Rombning tomoni 10 ga, diagonallarining nisbati 4 : 3 ga teng. Rombning yuzini toping.

8. Rombning $3\sqrt{3}$ ga teng bo'lgan balandligi tomonini teng ikkiga bo'ladi. Rombning perimetrini toping.

9. Rombning diagonallarini 3:4 kabi nisbatda, yuzi esa 384 ga teng. Uning tomonini toping.

10. Rombning balandligi 5 ga, diagonallarining ko'paytmasi 80 ga teng. Uning perimetrini toping.

A) 32   B) 16   C) 24   D) 28   E) 20

11. Perimetri 2p ga, diagonallarining yig'indisi m ga teng bo'lgan rombning yuzini toping.

A) $\dfrac{m^2 + p^2}{2}$ B) $\dfrac{m^2 - p^2}{2}$ C) $\dfrac{m^2 + p^2}{4}$ D) $\dfrac{m^2 - p^2}{4}$ E) $\dfrac{m^2 \cdot p^2}{4}$

12. Perimetri 14 ga teng bo'lgan ABCD romb berilgan, $A_1B_1C_1D_1$ to'rtburchak ushbu rombning o'rtalarini tutashtiradi. $A_2B_2C_2D_2$ to'rtburchak $A_1B_1C_1D_1$ to'rtburchak o'rtalarini tutashtiradi. $A_2B_2C_2D_2$ to'rtburchakning perimetrini toping.

13. Rombning kichik diagonali $\sqrt[4]{3}$ ga, yuzi 1,5 ga teng. Uning o'tmas burchagini toping.

A) 150^0 B) 120^0 C) 135^0 D) 110^0 E) 140^0

13. Rombning tomoni 6 ga, yuzi 9 ga teng. Rombning diagonallari yig'indisini toping.

A) 12   B) 11   C) 10   D) 9,5   E) 11,5

14. Rombning tomoni 6 ga, o'tkir burchagi 30^0 ga teng. Uning diagonallari ko'paytmasini toping.

A) 27   B) 18   C) 42   D) 36   E) 48

15. Rombning yuzi 16 ga, perimetri 12 ga teng. Uning diagonallari yig'indisini toping.

 A) 8   B) 12   C) 11   D) 10   E) 9

16. Rombning o'tmas burchagi 120^0 ga, katta diagonali $d\sqrt[4]{3}$ ga teng. Rombning yuzini hisoblang.

A) $\dfrac{3}{4}d^2\sqrt{3}$ B) $0,6d^2\sqrt{3}$ C) $3d^2\sqrt{3}$ D) $\dfrac{1}{2}d^2$ E) $0,9d^2$

17. Rombning tomoni 5 ga, diagonallaridan biri 6 ga teng. Rombning yuzini toping.

A) 24   B) 28   C) 30   D) 20   E) 22

18. Agar rombninh tomoni 10 ga, burchaklaridan biri esa 150^0 ga teng bo'lsa, uning yuzi qanchaga teng bo'ladi?

A) 100   B) 80   C) 90   D) 50   E) 60