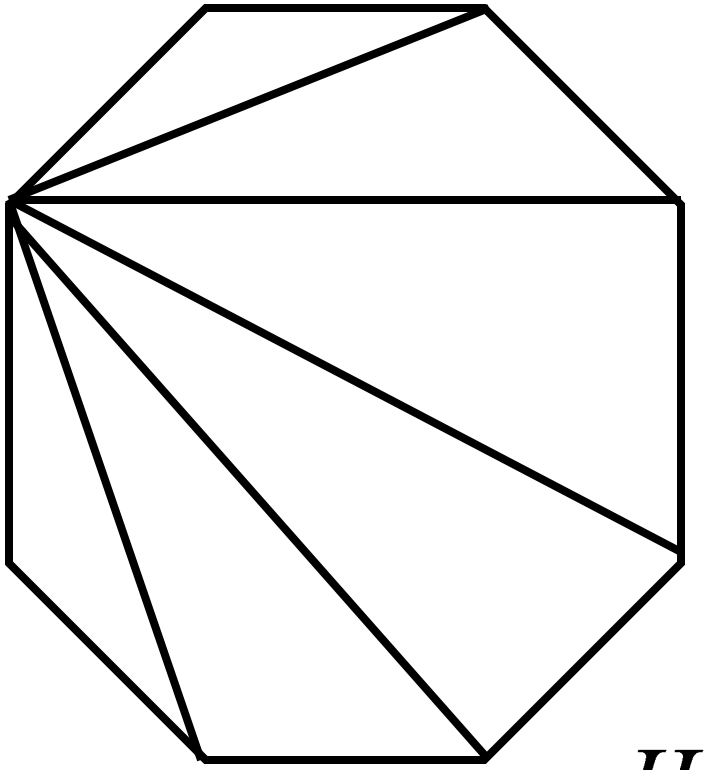
Площади простых фигур

Свойства площади



$$I.\ S > 0;$$

$$II.\ Если\ F_1 = F_2, то$$

$$S(F_1) = S(F_2);$$

$$III.\ F = F_1 + F_2 + F_3, то$$

$$S(F) = S(F_1) + S(F_2) + S(F_3);$$

$$IV.\ S_{кв} = a^2$$

№1

1. $a_{кв} = 1см,\ то\ S_{кв} = 1см^2$

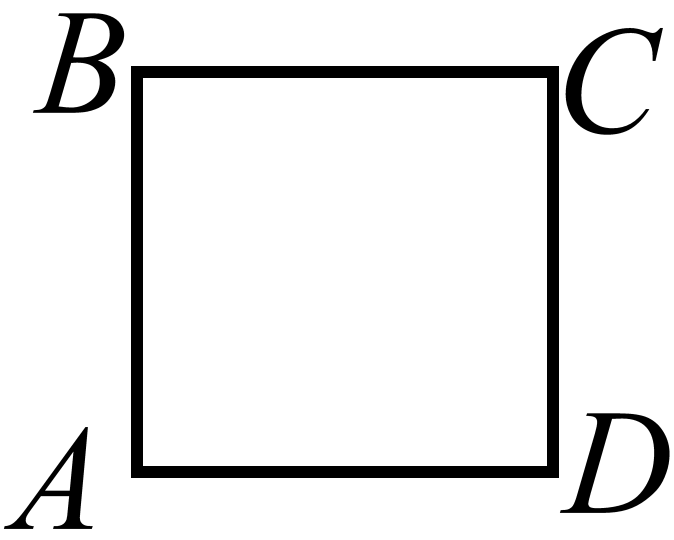
2. $a_{кв} = 1дм,\ то\ S_{кв} = 1дм^2 = 100см^2$

3. $a_{кв} = 1м,\ то\ S_{кв} = 1м^2 = 100дм^2 = 10000см^2$

4. $a_{кв} = 10м,\ то\ S_{кв} = 100м^2 = 1сотка = 1ар$

5. $a_{кв} = 100м,\ то\ S_{кв} = 10000м^2 = 1га$

№2



$$S_{кв.} = a^2.$$

$$ÀÂÑD - êâàäðàò,$$

$$à = 16; 24; 19.$$

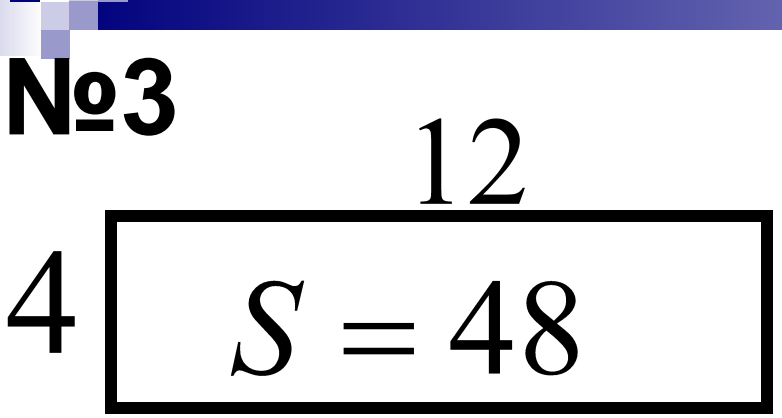
$$S_{ABCD} = ?$$

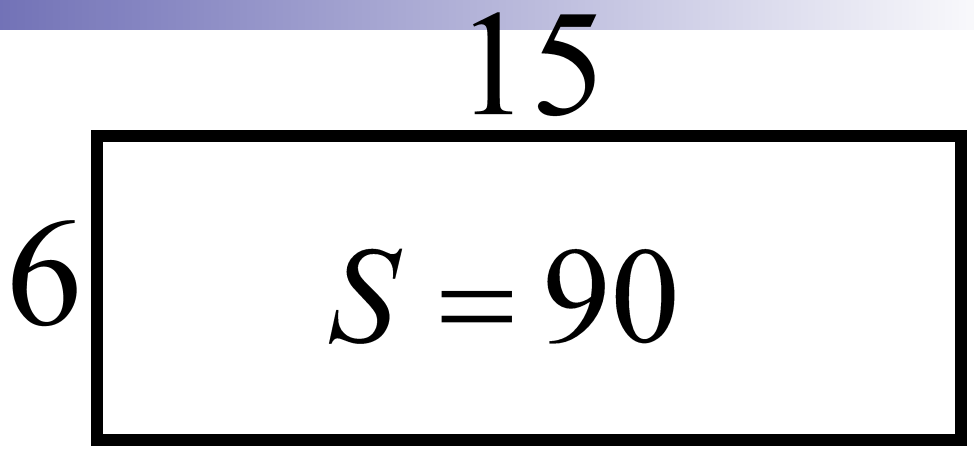
$$S_{ABCD} = (16)^2 = 256$$

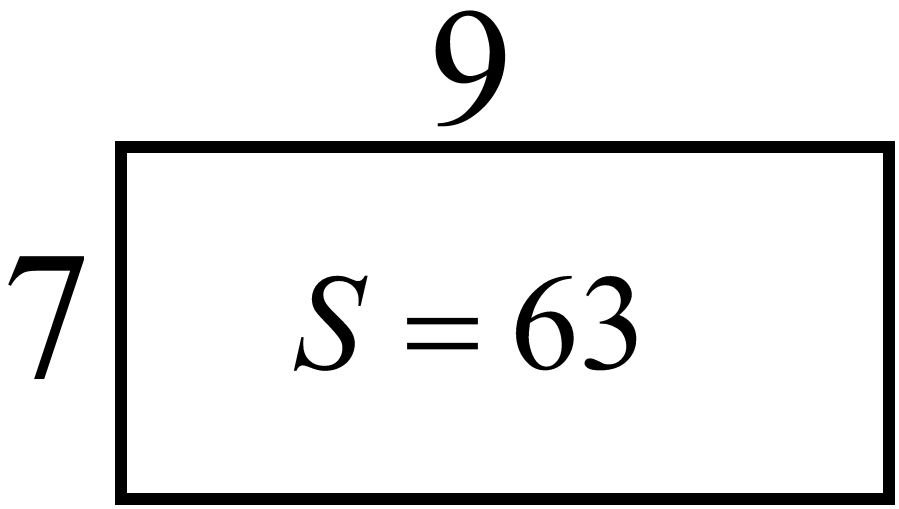
$$S_{ABCD} = (24)^2 = 576.$$

$$S_{ABCD} = (19)^2 = 361.$$

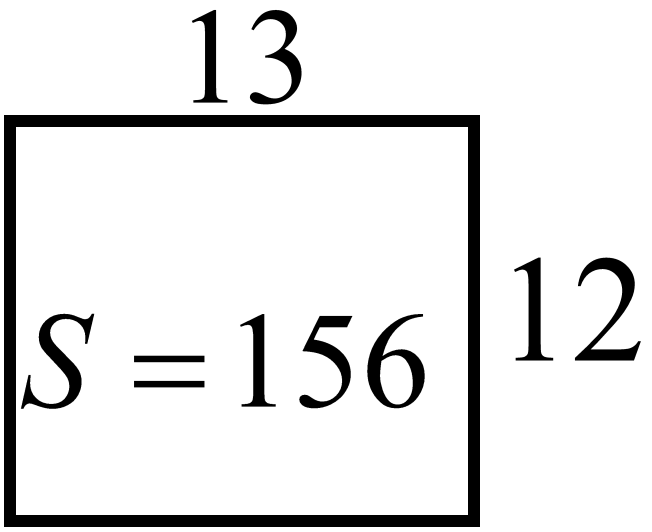
№3



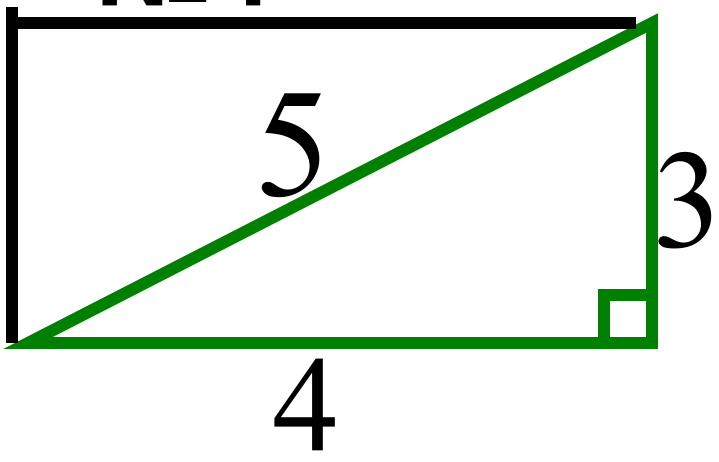




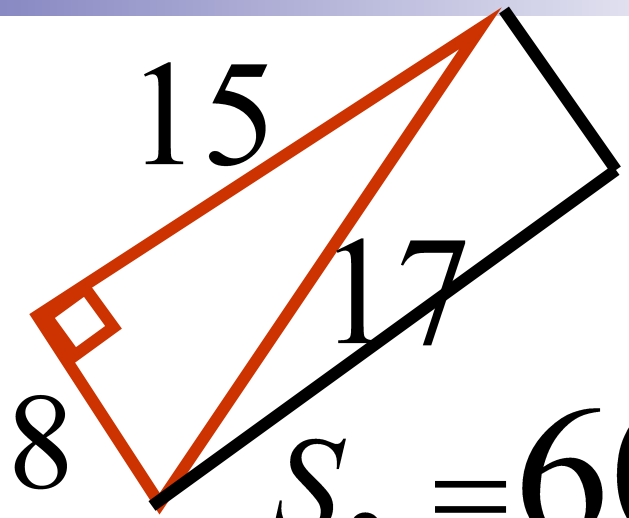
$S = ab$



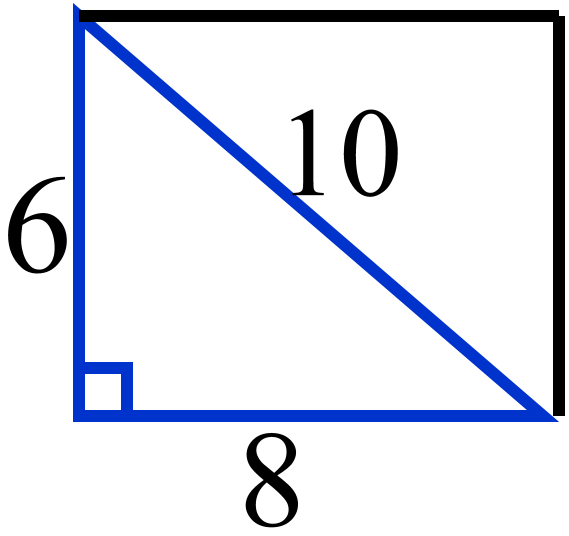
№4



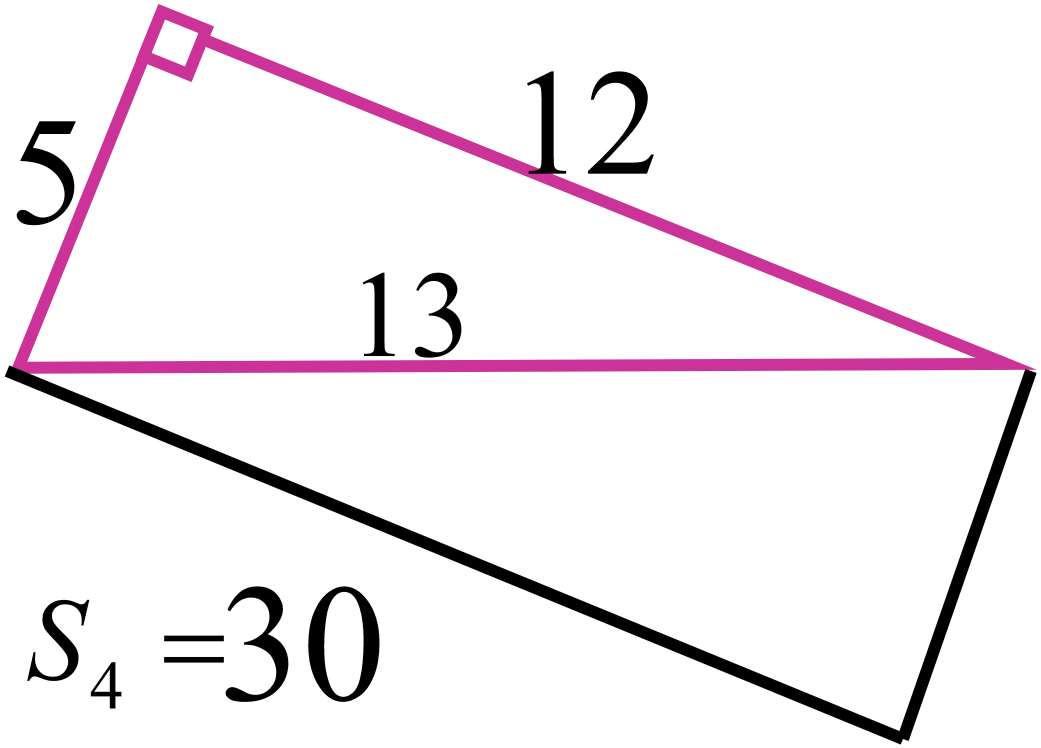
$S_1 = 6$



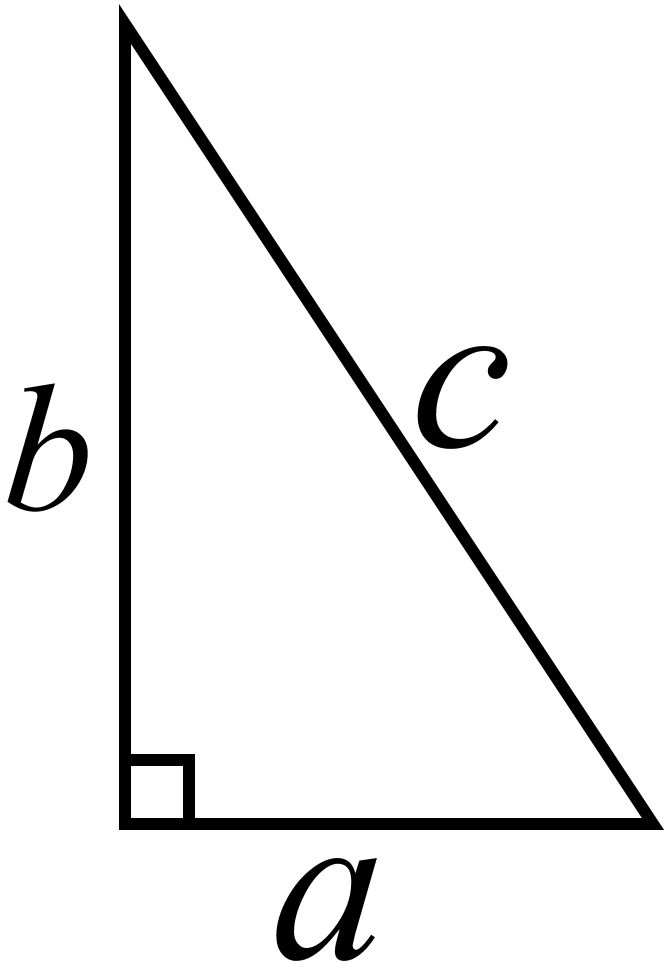
$S_2 = 60$



$S_3 = 24$

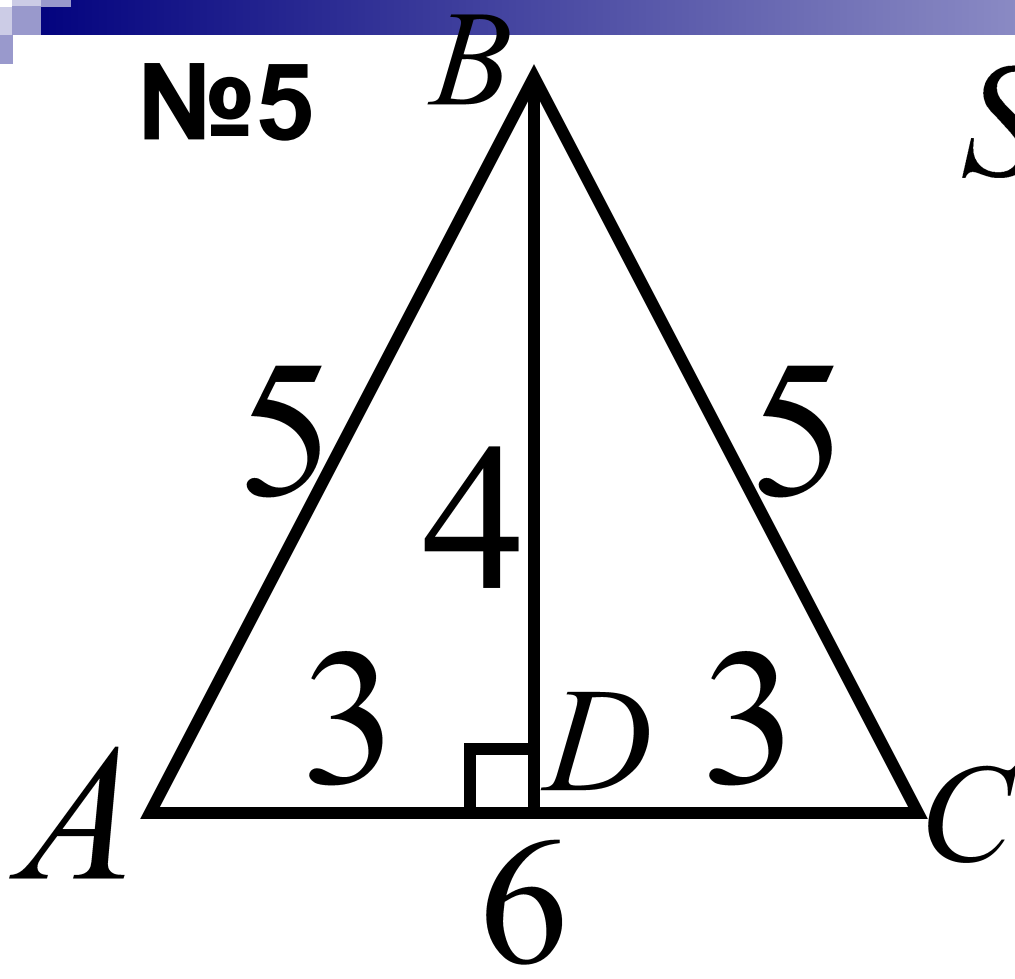


$S_4 = 30$



$$S_{прям.тр.} = \frac{1}{2}ab.$$

№5



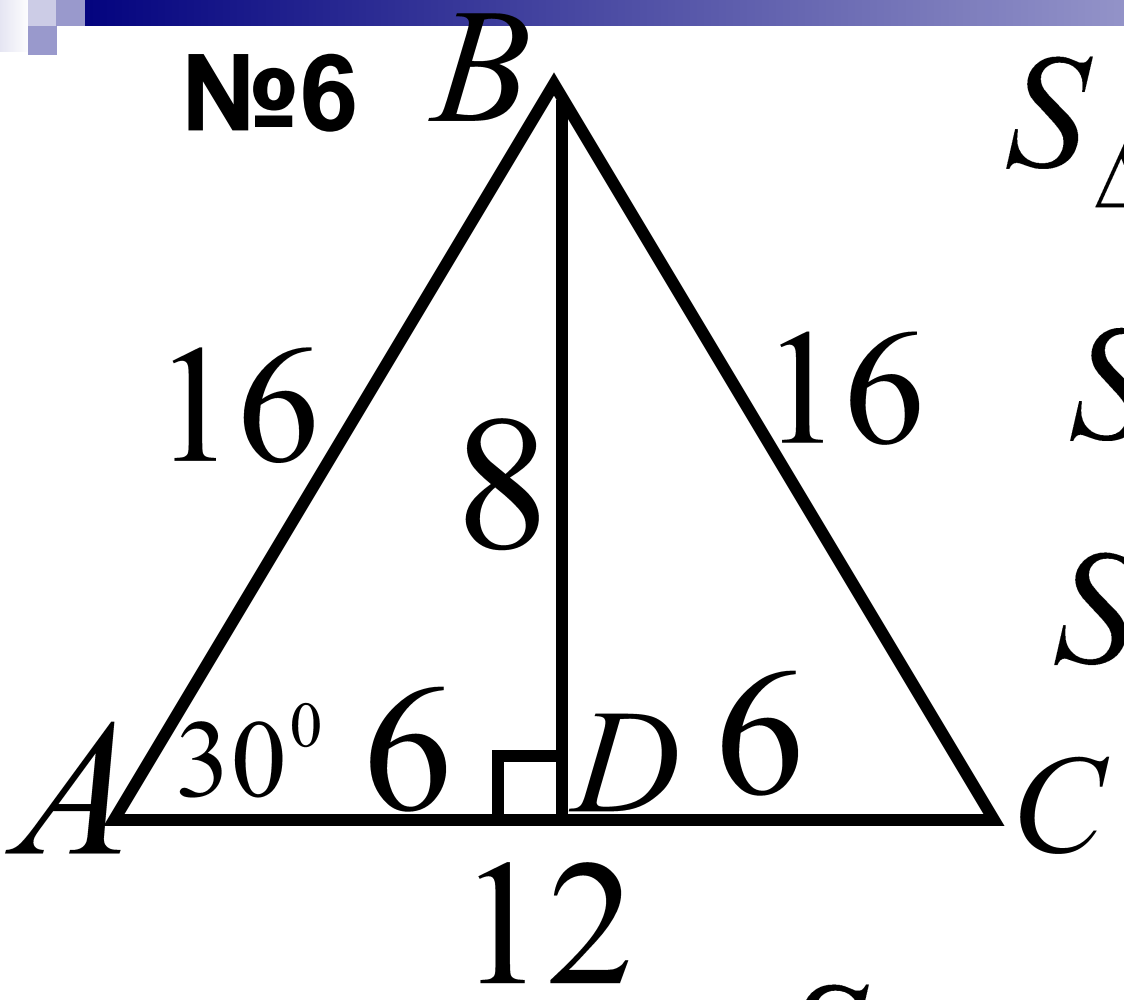
$$S_{\Delta ABC} =$$

$$S_{\Delta ABD} = 6$$

$$S_{\Delta BCD} = 6$$

$$S_{\Delta ABC} = 12$$

№6



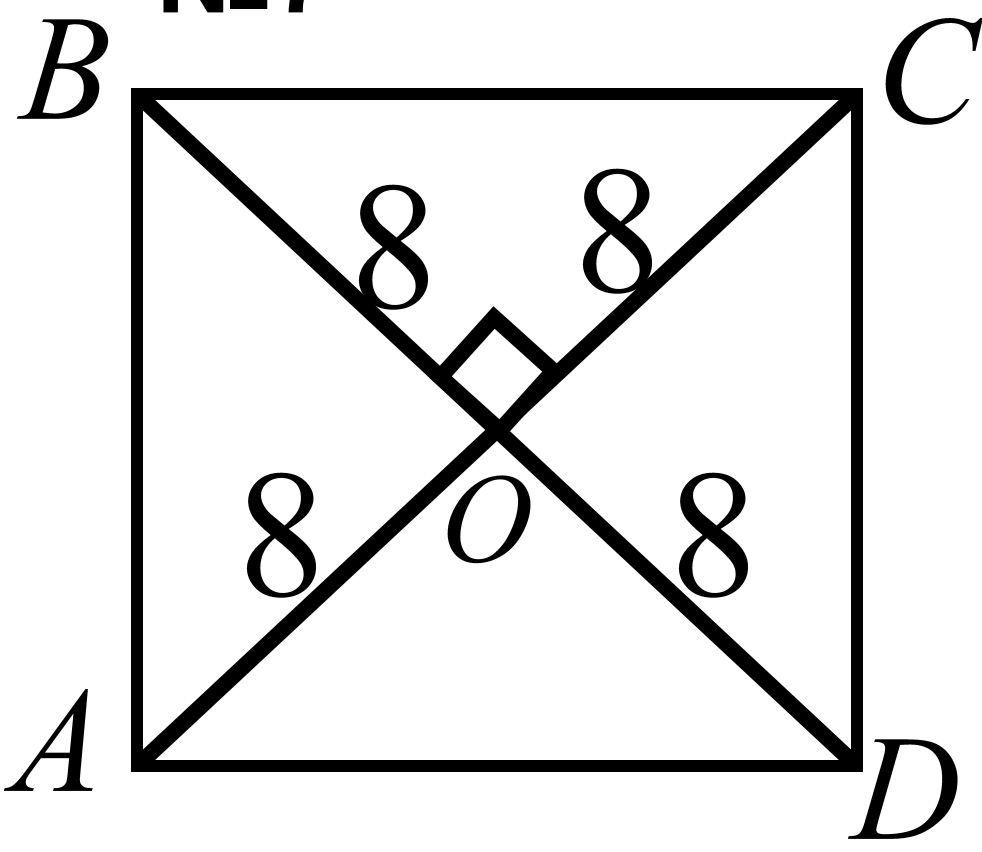
$$S_{\Delta ABC} =$$

$$S_{\Delta ABD} = 24$$

$$S_{\Delta BCD} = 24$$

$$S_{\Delta ABC} = 48$$

№7



$ABCD$ – квадрат,

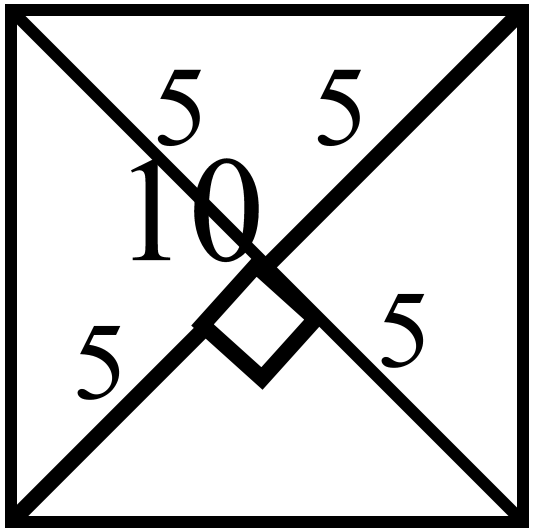
$BD = 16.$

$S_{ABCD} = ?$

$$S_{ABCD} = 128$$

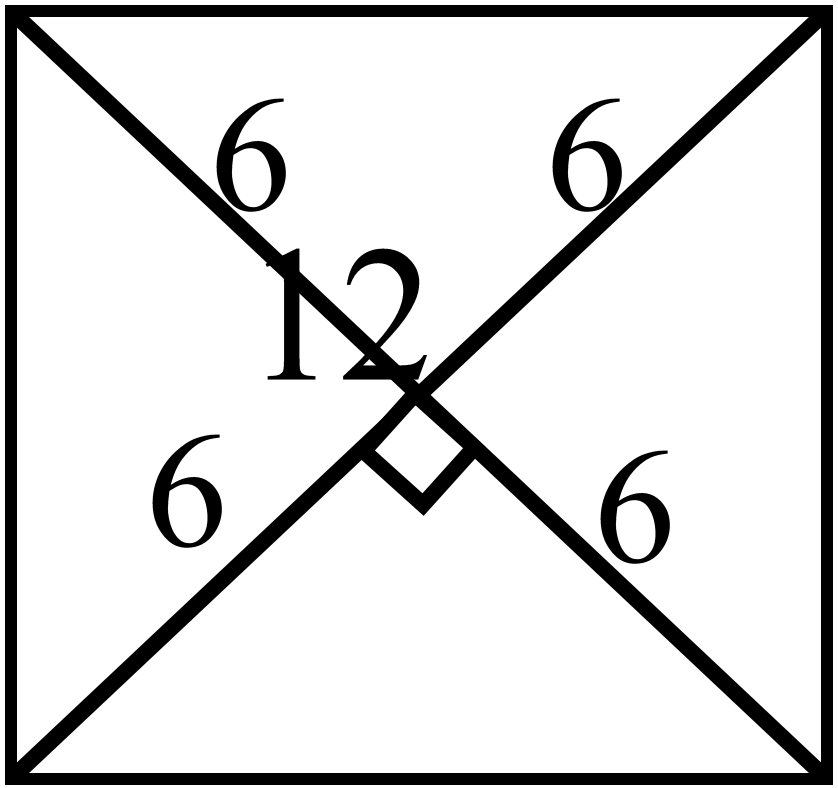
$$S_{\Delta BOC} = \frac{1}{2} BO \cdot OC = 32$$

№8



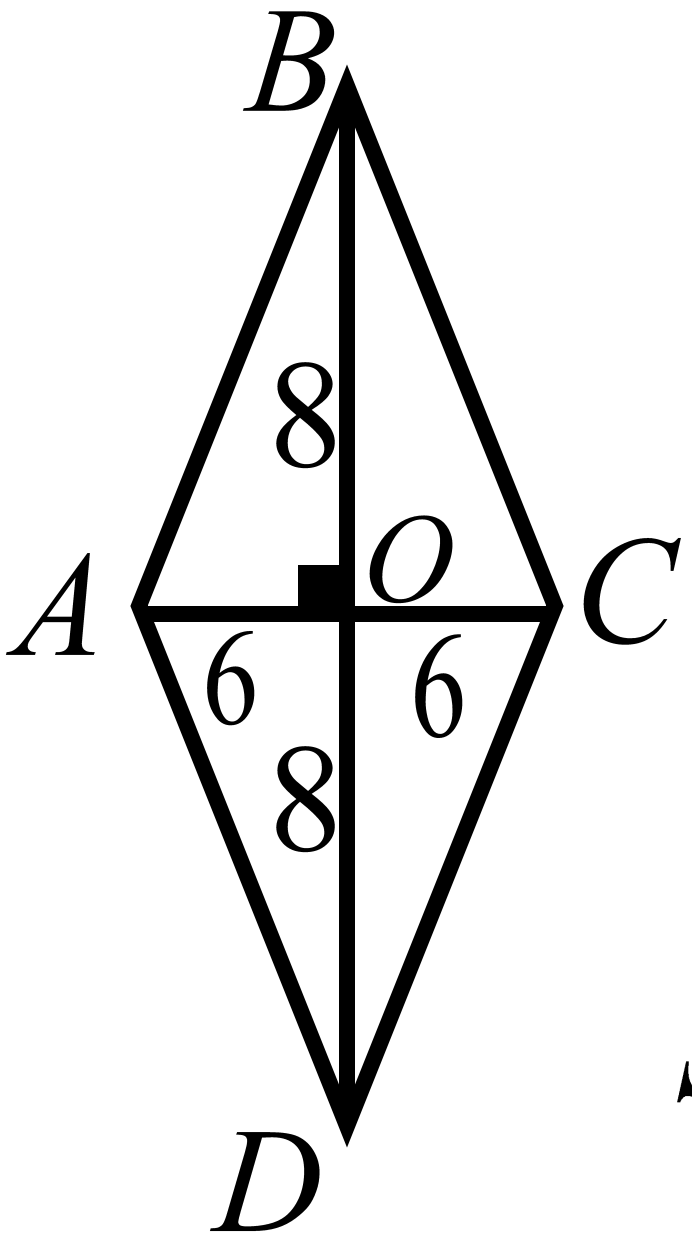
$$S_{\Delta} = \frac{1}{2} \cdot 5 \cdot 5 = 12{,}5$$

$$S_{квадр.} = 4 \cdot 12{,}5 = 50$$



$$S_{\Delta} = \frac{1}{2} \cdot 6 \cdot 6 = 18$$

$$S_{квадр.} = 4 \cdot 18 = 72$$



№9 $ABCD$ – ромб,

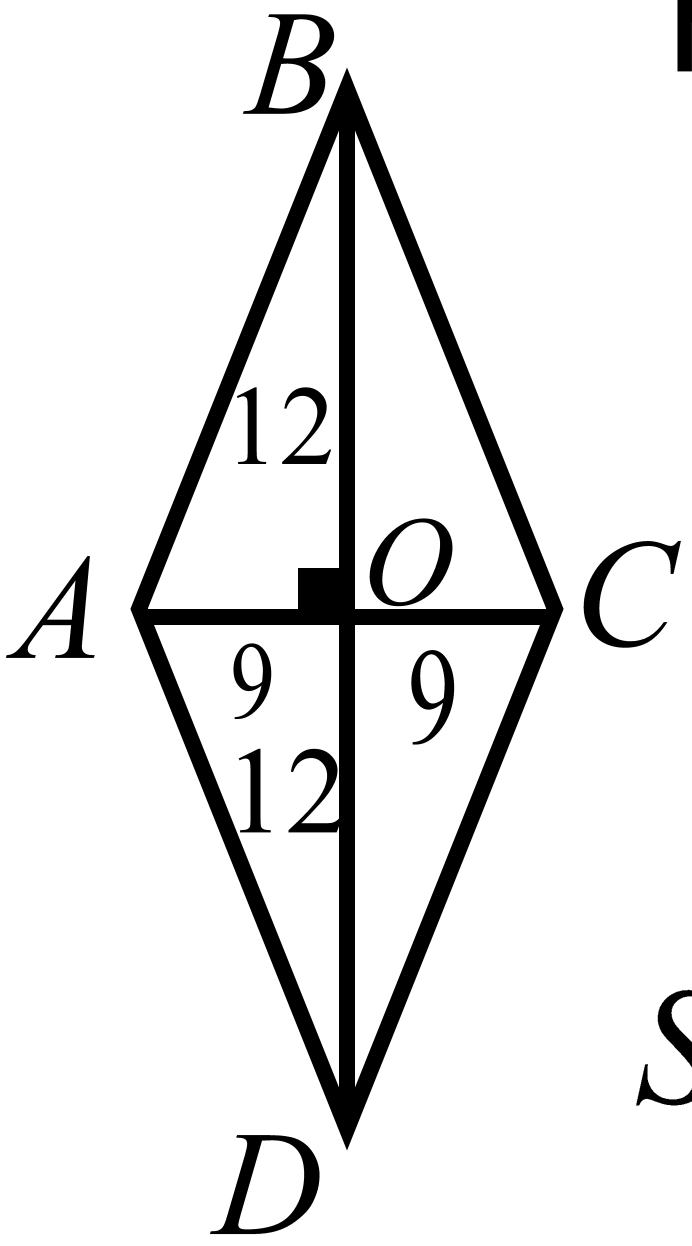
$BD = 16, AC = 12;$

$S_{ABCD} = ?$

$$S_{\Delta BOC} = \frac{1}{2} BO \cdot OC,$$

$$S_{\Delta BOC} = 24,$$

$$S_{ABCD} = 96.$$



№10 $ABCD$ – ромб,

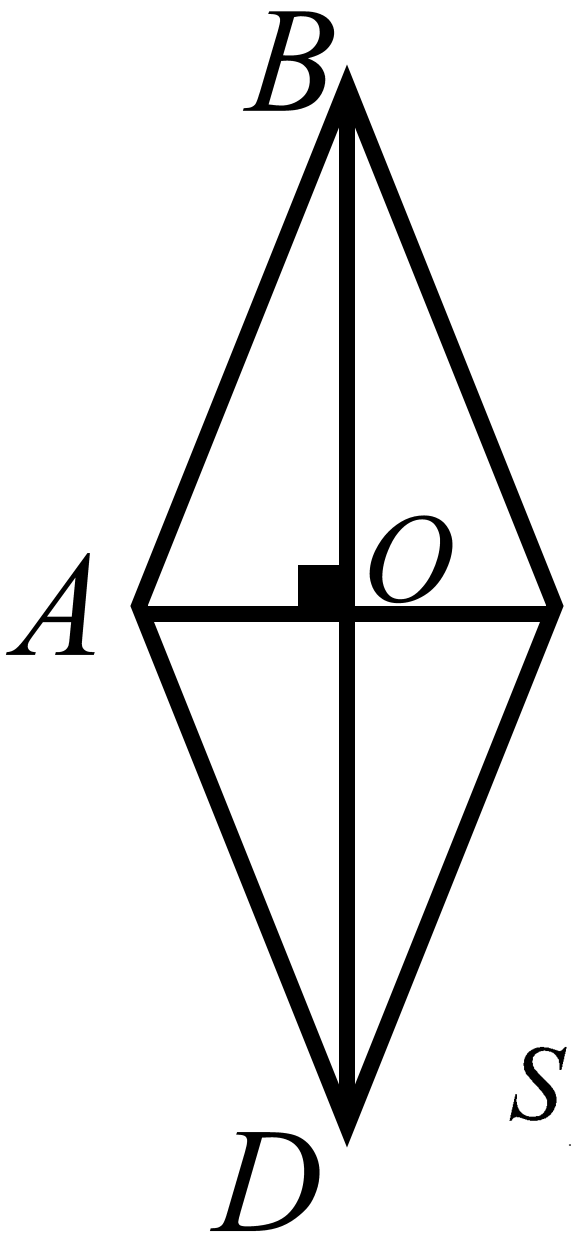
$BD = 24, AC = 18;$

$S_{ABCD} = ?$

$$S_{\Delta BOC} = \frac{1}{2} BO \cdot OC,$$

$$S_{\Delta BOC} = 54,$$

$$S_{ABCD} = 216.$$



№11 $ABCD - ромб,$

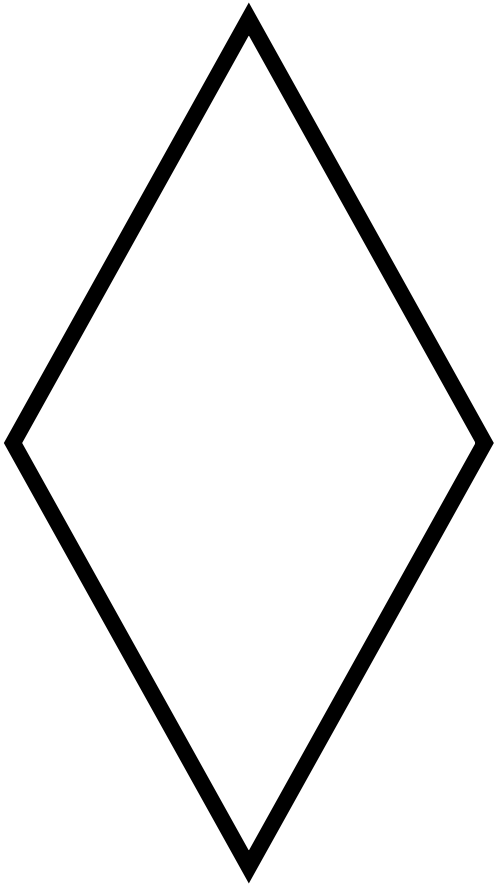
$BD = d_1, AC = d_2;$

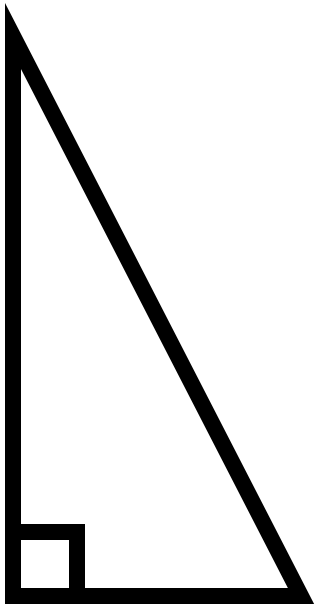
$S_{ABCD} = ?$

$$S_{\Delta BOC} = \frac{1}{2} BO \cdot OC,$$

$$S_{\Delta BOC} = \frac{1}{2} \cdot \frac{1}{2} d_1 \cdot \frac{1}{2} d_2,$$

$$S_{ABCD} = 4 \cdot \frac{1}{8} d_1 \cdot d_2 = \frac{1}{2} d_1 \cdot d_2.$$





ДЗ: пункт 48, 49.

№449(аб), 450 (а,б), 452 (авг), 453, 455