

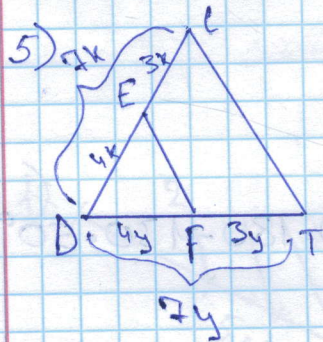
$$4) \frac{AB}{A_1B_1} = \frac{BC}{B_1C_1} = \frac{AC}{A_1C_1}$$

$$\frac{12}{3} = \frac{BC}{2} = \frac{16}{A_1C_1}$$

$$BC = 8 \text{ см}, A_1C_1 = 4 \text{ см}$$

$$P_{\Delta A_1B_1C_1} = 9 \text{ см}$$

$$P_{\Delta ABC} = 36 \text{ см}$$



$$\frac{EC}{DC} = \frac{3x}{7x}$$

$$\frac{FT}{DF} = \frac{3}{4}$$

$$\frac{DE}{EC} = \frac{DF}{FT}$$

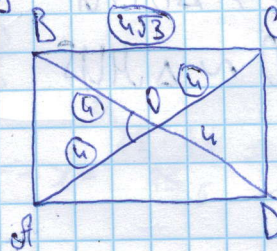
$$\frac{4}{3} = \frac{4}{3} \Rightarrow EF \parallel CT$$

28.02.25

Классная работа.

Тема 19

№ 1



$$1) AD = AC \Rightarrow AO = BO = OD = OC = 4 \text{ см}$$

$$2) \Delta AOB - \text{P/S} \Rightarrow \angle AOB = 60^\circ \Rightarrow AC = 8 \text{ см}$$

$$D \Rightarrow \Delta AOD - \text{равностор.} \Rightarrow AB = 4 \text{ см}$$

3) по м. Пифагора в $\triangle ABC$

$$AC^2 = AB^2 + CB^2$$

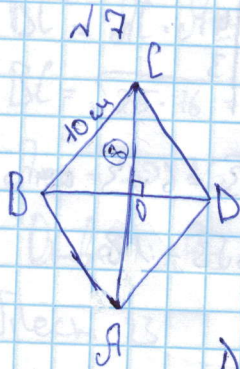
$$8^2 = 4^2 + CB^2$$

$$CB^2 = 64 - 16$$

$$CB = \sqrt{48} = 16 \cdot 3 = 4\sqrt{3}$$

$$4) S = AB \cdot CB = 4 \cdot 4\sqrt{3} = 16\sqrt{3} \text{ см}^2$$

Итого 20



$S_0 = ?$

$$S_0 = \frac{1}{2} d_1 \cdot d_2$$

$$AC = 16 \text{ см}$$

$$BD = OD, AD = OC = AC : 2 = 16 : 2 = 8 \text{ см}$$

$$AC \perp BD$$

2) $\triangle BOC$, $\angle O = 90^\circ \Rightarrow$ по м. Пифагора

$$BC^2 = BO^2 + CO^2$$

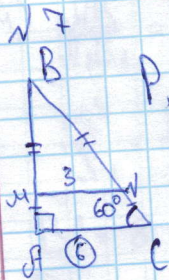
$$10^2 = 8^2 + BO^2$$

$$BO^2 = 100 - 64 = 36$$

$$BO = \sqrt{36} = 6 \text{ см} \Rightarrow BD = 12$$

$$S = \frac{1}{2} BD \cdot AC = \frac{1}{2} \cdot 12 \cdot 16 = 96 \text{ см}^2$$

Задание 21



Р, А-?

1) $\triangle ABC \sim \triangle MNC$ - ср. линия $\triangle ABC \Rightarrow MN \parallel AC$,

$$MN = \frac{1}{2} AC \Rightarrow AC = 2MN = 6 \text{ см}$$

2) $\angle A = 90^\circ, \angle C = 60^\circ \Rightarrow \angle B = 30^\circ \Rightarrow$

$$\Rightarrow \angle B = 30^\circ \Rightarrow AC = \frac{1}{2} BC \Rightarrow BC = 12 \text{ см}$$

3) по т. Пифагора

$$BC^2 = AB^2 + AC^2$$

$$12^2 = AB^2 + 6^2$$

$$144 - 36 = AB^2 \Rightarrow AB = \sqrt{108} = \sqrt{9 \cdot 4 \cdot 3} = 3 \cdot 2\sqrt{3} = 6\sqrt{3} \text{ см}$$

$$4) P = AB + BC + AC = 6\sqrt{3} + 12 + 6 = \cancel{24} = 6\sqrt{3} + 18$$

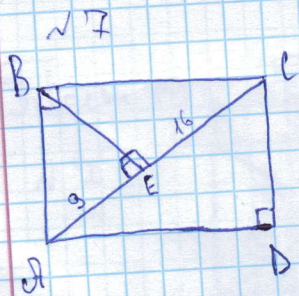
$$5) A = \frac{1}{2} \cdot AB \cdot AC = \frac{1}{2} \cdot 6\sqrt{3} \cdot 6 = 18\sqrt{3} \text{ см}^2$$

$$\text{Ответ: } P = 6\sqrt{3} + 18$$

$$A = 18\sqrt{3} \text{ см}^2$$

$$\begin{array}{r} 108 \overline{) 9} \\ 12 \overline{) 4} \\ 3 \overline{) 3} \\ 1 \end{array}$$

Задание 22



А-?

1) по т.

2) по т. Евклида

$$BE^2 = AE \cdot EC$$

$$BE = \sqrt{9 \cdot 16} = 3 \cdot 4 = 12 \text{ см}$$

$$S_{\Delta} = \frac{1}{2} BE \cdot AC = \frac{1}{2} \cdot 12 \cdot 25 = 150 \text{ см}^2$$

$$DAC = 9 + 16 = 25$$

$$3) S_{\square} = 2S_{\Delta} = 2 \cdot 150 = 300 \text{ см}^2$$

4) Два м. камня

$$BA^2 = AC \cdot AE$$

$$BA = \sqrt{25 \cdot 9} = 5 \cdot 3 = 15 \text{ см}$$

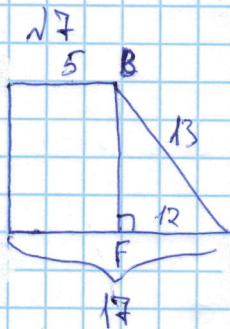
$$BC^2 = AC \cdot CE$$

$$BC = \sqrt{25 \cdot 16} = 5 \cdot 4 = 20 \text{ см}$$

$$S_{\square} = 20 \cdot 15 = 300 \text{ см}^2$$

Ответ: $S_{\square} = 300 \text{ см}^2$

Задача 23



Дополним боковую $BF = AD$

$$AB = DF = 5 \text{ см} \Rightarrow FC = 17 - \overset{5 = 12 \text{ см}}{\cancel{12}} = 5$$

2) ΔBFC , $\angle(F) = 90^\circ \Rightarrow$ по м. Пифагора

$$BC^2 = BF^2 + FC^2$$

$$13^2 = BF^2 + 12^2$$

$$169 - 144 = BF^2 \Rightarrow BF = \sqrt{25} = 5 \text{ см}$$

$$3) A_{Tf} = \frac{AB+DC}{2} \cdot BF = \frac{5+17}{2} \cdot 5 = 11 \cdot 5 = 55 \text{ cm}^2$$

Other! $A_{Tf} = 55 \text{ cm}^2$

