

лог

1101

$$11.1) \sqrt{x+11+4\sqrt{x+4}} + \sqrt{x+16-6\sqrt{x+4}} = 6$$

$$y: x+4=y \Rightarrow y^2 = x+4 \Rightarrow x = y^2 - 4$$

$$\sqrt{(y^2-4)+11+4y} + \sqrt{(y^2-4)+16-6y} = 6$$

$$\sqrt{y^2+4y+4} + \sqrt{y^2-6y+9} = 6$$

$$\sqrt{(y+2)^2} + \sqrt{(y-3)^2} = 6$$

$$\sqrt{y^2} = |y|$$

$$|y+2| + |y-3| = 6$$

$$y \geq 3$$

$$|y+2| = y+2, |y-3| = y-3$$

$$(y+2) + (y-3) = 6 \Rightarrow 2y-1=6 \Rightarrow 2y=7$$

$$y = \frac{7}{2} \geq 3$$

$$x = y^2 - 4 = \left(\frac{7}{2}\right)^2 - 4 = \frac{49}{4} - \frac{16}{4} = \frac{33}{4}$$

Ответ: $\frac{33}{4}$

75.

11.2) $\angle BB_1C$, $\angle CAB$, $\angle CCB$ - вписанные и опираются на одну и ту же дугу, значит они равны.

$\triangle B_1OC$ - прямоуголь.

$$\angle B_1OC = 90^\circ - \angle BB_1C.$$

$\triangle LCO$

$$\angle LCO = 90^\circ - \angle B_1OC = \angle BB_1C = \angle BAC.$$

$\triangle CAM$, углы BAC и ACC_1 равны $\Rightarrow$
 $\angle BAC = \angle ACC_1 = 90^\circ : 2 = 45^\circ$

Ответ: 45° .

75

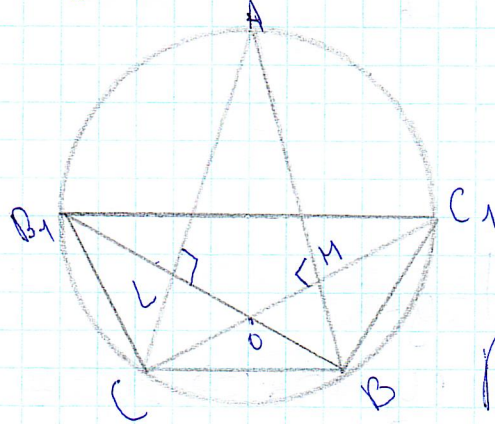


рис. к 11.4.

11.2) Система глина - L , система - W ,
относится $S_1 = L \cdot W$

$$L_2 = L + 20$$

$$W_2 = W + 8$$

$$S_2 = (L + 20) \cdot (W + 8)$$

$$S_2 - S_1 = 9280 \text{ м}^2$$

$$(L+20)(W+8) - LW = 9280$$

$$LW + 8L + 20W + 160 - LW = 9280$$

$$8L + 20W + 160 = 9280$$

$$8L + 20W = 9120 \quad /:4$$

$$2L + 5W = 2280$$

$$L_3 = L - 20$$

$$W_3 = W - 8$$

$$S_3 = (L - 20)(W - 8)$$

$$S - S_3 = LW - (L - 20)(W - 8)$$

$$S - S_3 = LW - (LW - 8L - 20W + 160)$$

$$S - S_3 = LW - LW + 8L + 20W - 160$$

$$S - S_3 = 8L + 20W - 160$$

by substitution, since $8L + 20W = 9120$

$$S - S_3 = 9120 - 160 = 8960$$

Answer: 8960.

75.

Answer: 215.