

KB - диаметр (по обь.)

$$\frac{AK}{5} = \frac{CK}{7}$$

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~~AK = x~~

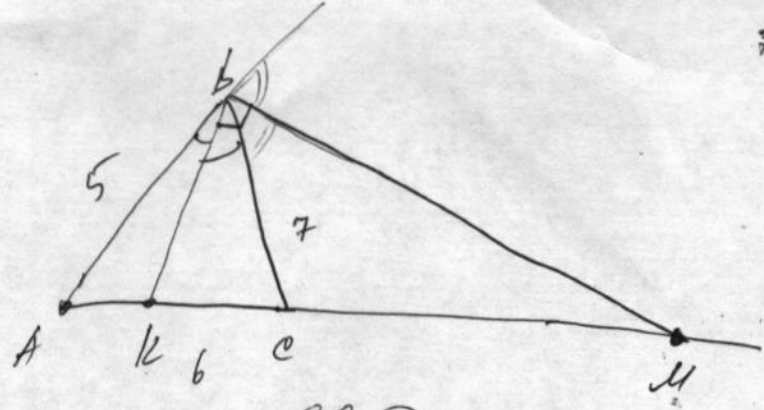
~~AK = x → CK = 6 - x~~

~~$$\frac{x}{6-x} = \frac{5}{7}$$~~

~~$$30 - 5x = 7x$$~~

~~$$12x = 30$$~~

~~$$x = \frac{30}{12} = \frac{5}{2} = 2,5 = CK$$~~



BM - диаметр (по обь.)

~~$$\frac{AM}{11} = \frac{BC}{CM} \Rightarrow \frac{AM}{CM} = \frac{AB}{BC} = \frac{5}{7}$$~~

~~$$\frac{CM}{AM} = \frac{AB}{BC} = \frac{5}{7}$$~~

пусть CM = x → AM = x + 6

~~$$\frac{x+6}{x} = \frac{5}{7}$$~~

~~$$\frac{x}{x+6} = \frac{5}{7}$$~~

~~$$7x + 42 = 5x$$~~

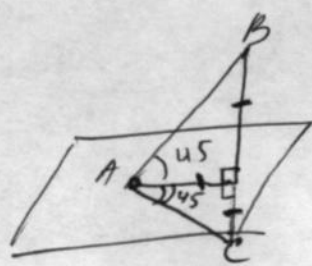
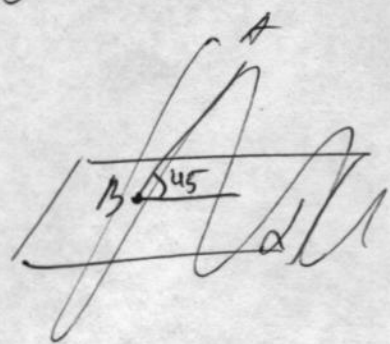
~~$$5x + 30 = 7x$$~~

~~$$2x = 30$$~~

~~$$2x = 30$$~~

~~$$x = 15 = CM$$~~

$KM = CM + CK = 15 + 2,5 = 17,5$



$\triangle AOB = \triangle BOC = \triangle AOC$ -
 прямоугольн. (по углу и
 2-ух прилежащих катетам)
 $\Rightarrow AB = BC = AC \Rightarrow$
 $\triangle ABC$ - р/ср. \Rightarrow
 $\angle BAC = 60^\circ$