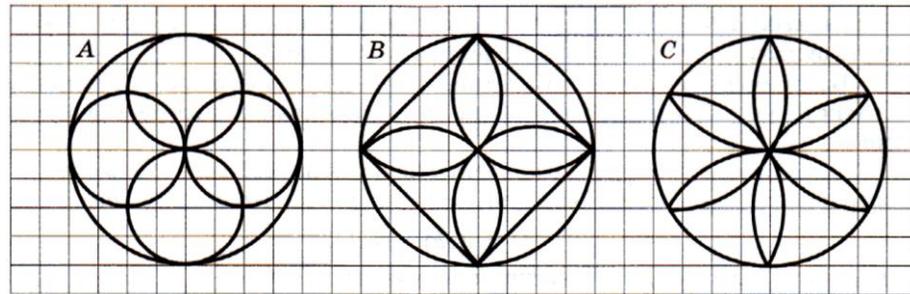
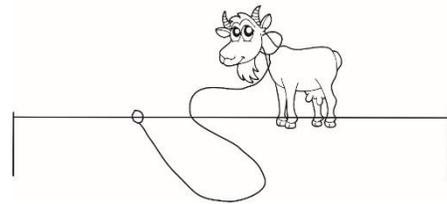
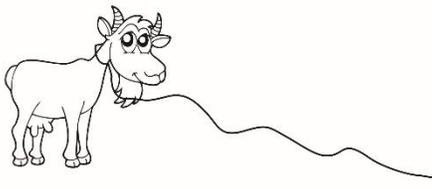


Math 5b, homework 16.

1. Copy the picture, use compass:



2. A goat is tied to a stake (or 2 poles 9 m apart) with a rope of length (3 m). What shape it will graze? Draw the picture using 1 cm for 1 m.



3. Draw a circle. Mark a point A on this circle. How many diameters can you draw through the point A? How many chords? Which chord will be the longest?
4. Evaluate (Answer is 0.1).

$$\frac{0.6 + 2.4 \cdot \left(3 - 0.7 \cdot \frac{5}{7}\right) - 7 : 3 \frac{1}{2}}{\left(5 \frac{1}{4} \cdot 4 - \left(5.9 - 2.7 : \frac{9}{11}\right)\right) \cdot 2 \frac{1}{2}}$$

5. A rope was folded in half, then in half again, and then in half one more time. Then the folded rope was cut in one place. It broke into pieces. What could have been the length of the rope if, among these pieces, there were two of a known length, one 12 cm, and the other 7 cm?
6. Four boys—Alex, Sam, Michael, and Julian—were playing soccer in the yard and broke a window.
 "Who broke the window?" Aunt Dorothy asked.
 "Either Julian or Michael broke the window," said Sam.
 "I didn't break the window," Julian objected.
 "Michael did it," said Alex.
 "No, Alex, you're wrong," Michael noted.

"Well, did they give you a puzzle?" Uncle Bill, who was watching this conversation, summarized. "I can also add that three of these soccer players always tell only the truth. But I don't know the fourth one very well."

Who broke the window? With which of the boys was Uncle Bill not very familiar?