Math 4d. Homework 13.

1. A swimming pool can be filled by pump A in 3 hours and by pump B in 6 hours, each pump working on its own. At 9 am pump A is started. At what time will the swimming pool be filled if pump B is started at 10 am?

2. The older brother can clean up the room in 2 hours, the younger brother can completely ruin it in 3 hours. In how many hours will the room be cleaned if they are locked together in the messy room? (it's a math problem, the answer "they will play games" will not be accepted!)

3. Fill the table:

a	1	3	4	6	7	8	9	15
b	0	4	5	6	9	10	11	29
2a+2b								
2(a+b)								

4. 60 kids took part in the swimming meets. There were three times as many girls as boys. How many boys and how many girls competed? Write an equation and solve it.

5. Solve the equations:

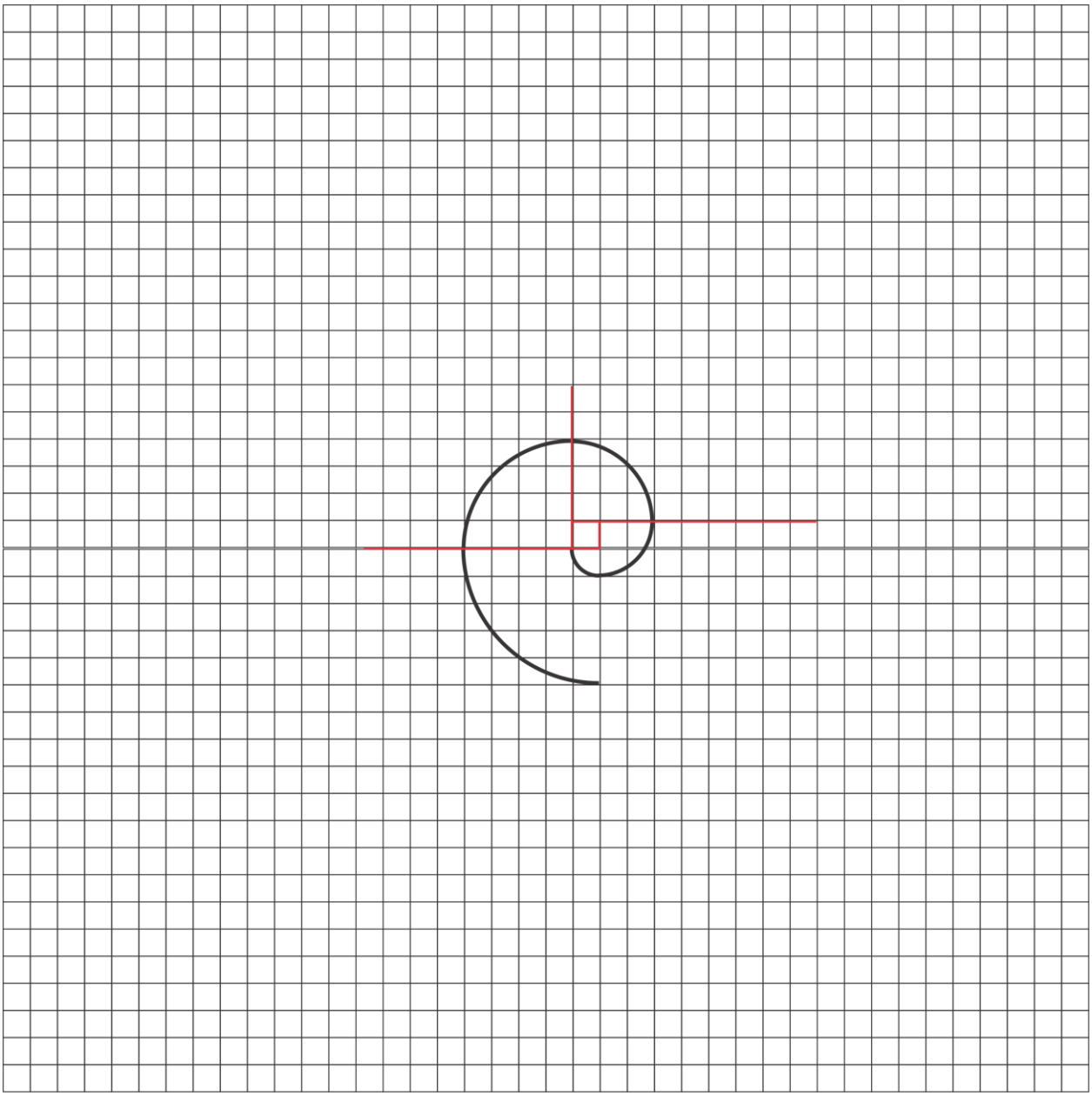
$a.\ \ 13\frac{2}{9} - \left(x + 2\frac{5}{9}\right) = 7\frac{5}{9};$ $\qquad b.\ \ \left(y - 4\frac{8}{11}\right) + 1\frac{9}{11} = 7\frac{3}{11}$

6. a. The sum of numbers a and b equal to 7. What would be the value of

$$5 \cdot a + 5 \cdot b?$$

7. Mother is twice as old as her daughter. Father is 5 years older then mother. Together they are 120 years old. How old is father?

8. Continue the spiral, use compass:



9. Evaluate:

a. $\frac{5}{6}\cdot\left(\frac{3}{10}+1\frac{1}{2}\right);$ *b.* $\left(\frac{5}{8}+\frac{3}{4}\right)\cdot 1\frac{5}{11};$ *c.* $\frac{3}{10}\cdot\frac{5}{7}+\frac{11}{14};$