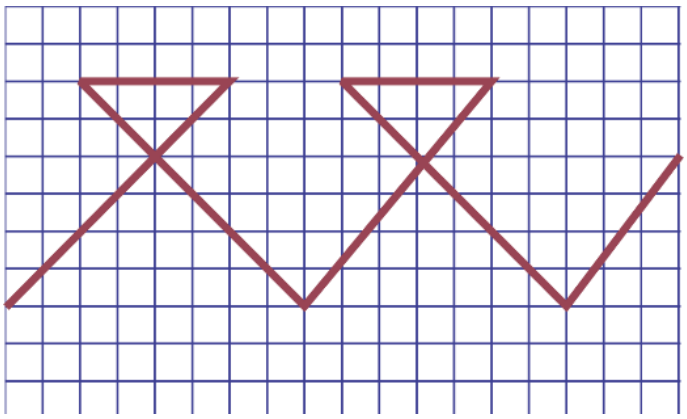
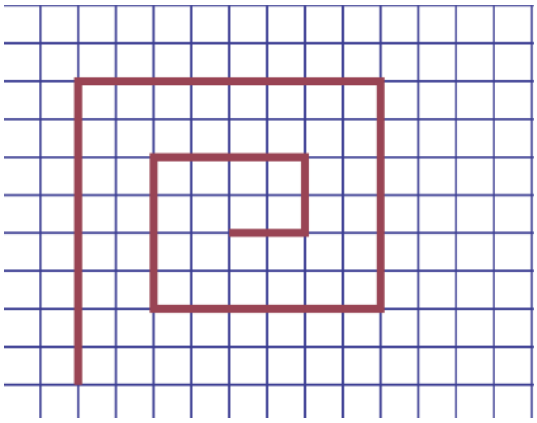
Math 4e. Homework 19.

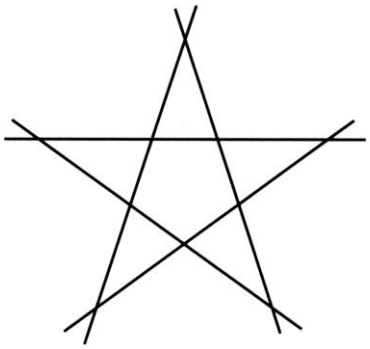
1. In your notebook, mark three points, A, B, C. Draw lines (AB), (AC), (BC). Draw another line, crossing these three lines, use ruler.

2. In your notebook copy the picture and continue, use ruler:

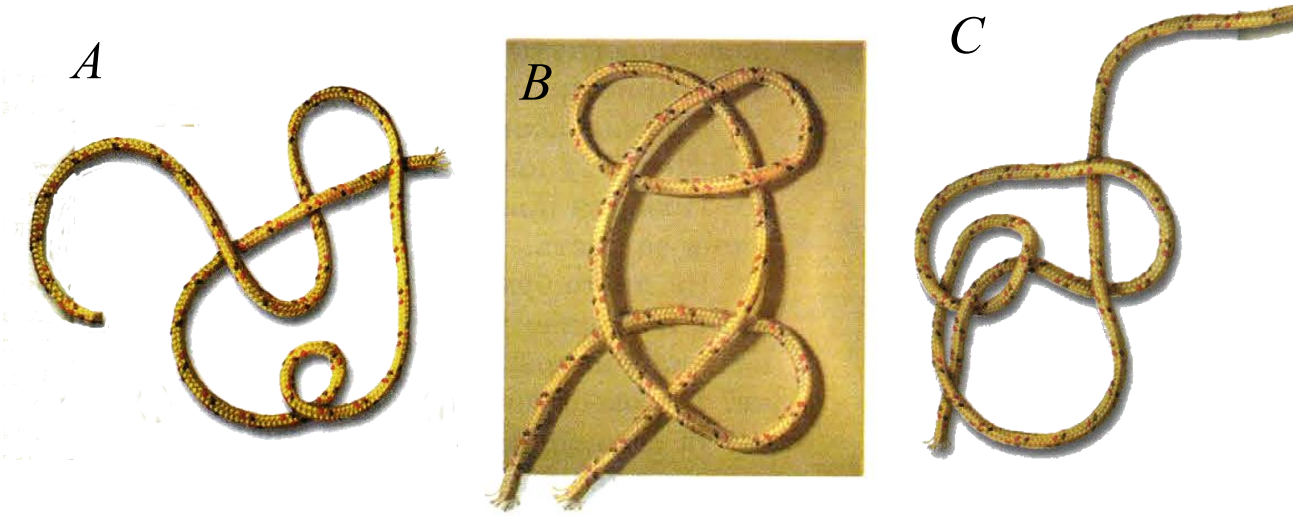




3. How many straight lines are shown in the picture? How many points of intersection do these lines have?



4. A piece of rope is arranged as shown on the picture. What do you think—will a knot form if you pull the ends of the rope? Check yourself by conducting an experiment.



5. Points A, B, and C lie on the same straight line. The distance between points A and B is 20 cm, and the distance between points B and C is 5 cm. Find the distance between points A and C.

6. From two numbers chose one that has greater absolute value:

   $a. -61.5 \text{ and } 61;$ $b.\ 21.111 \text{ and } -21{,}11;$ $c.\ \frac{25}{26} \text{ and } -\frac{26}{27}.$

7. Evaluate:

   $a.\ \left(3\frac{3}{5} - 2\frac{1}{15}\right) \cdot 5;$ $b.\ \left(1\frac{14}{17} - 1\frac{1}{34}\right) \cdot 34;$

   $c.\ \left(2\frac{3}{4} + 4\frac{1}{8}\right) \cdot 1\frac{5}{11};$ $d.\ 1\frac{2}{5} \cdot \left(1\frac{1}{14} - \frac{5}{7}\right);$

   $e.\ 3\frac{4}{13} \cdot 15\frac{3}{41} - 3\frac{4}{13} \cdot 2\frac{3}{41};$ $f.\ 8\frac{3}{17} \cdot 5\frac{1}{4} + 3\frac{14}{17} \cdot 5\frac{1}{4};$

8. Calculate mentally:

| | | | |
|---|---|---|---|
| $17 + 0.3;$ | $0.728 - 0.7;$ | $0.2 \cdot 5;$ | $2.6 : 2$ |
| $0.05 + 25;$ | $0.8 - 0.25;$ | $4 \cdot 2.5;$ | $1.8 : 9$ |
| $0.37 + 2.03;$ | $1 - 0.6;$ | $0.5 \cdot 20;$ | $3.7 : 10$ |
| $3.84 + 0.2;$ | $0.7 - 0.07;$ | $0.24 \cdot 3;$ | $5.3 : 0.1$ |
| $1.27 + 2.3;$ | $3 - 0.85;$ | $2.7 \cdot 5;$ | $6 : 0.3$ |

9. A father is $3\frac{1}{3}$ times as old as his son, and the son is 28 years younger than the father. How old are the father and the son?

10. Calculate the shaded area; the side of each grid square is 1 cm. :