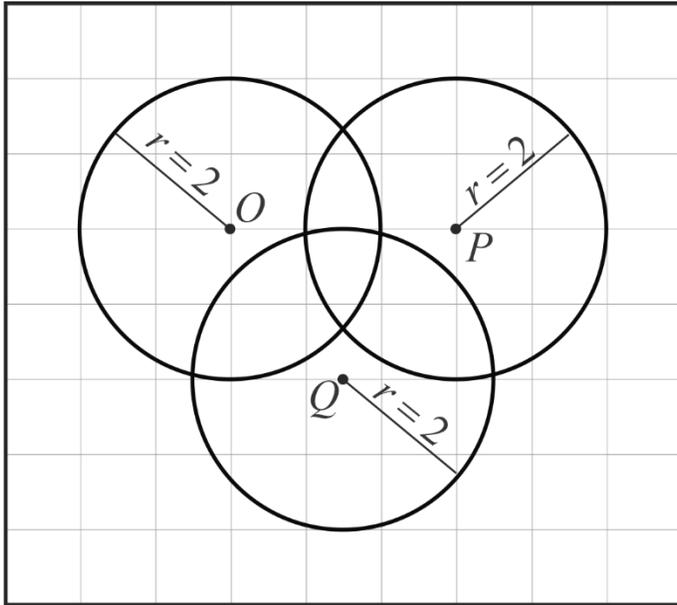
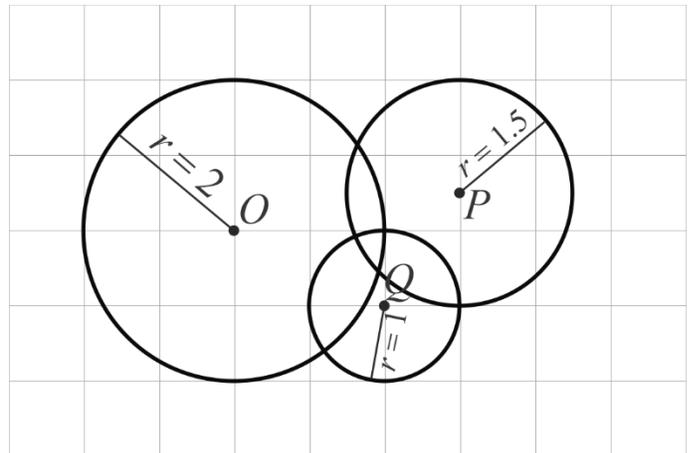


Math 5b, homework 18.

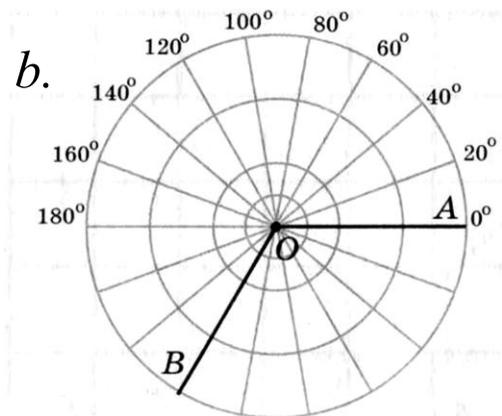
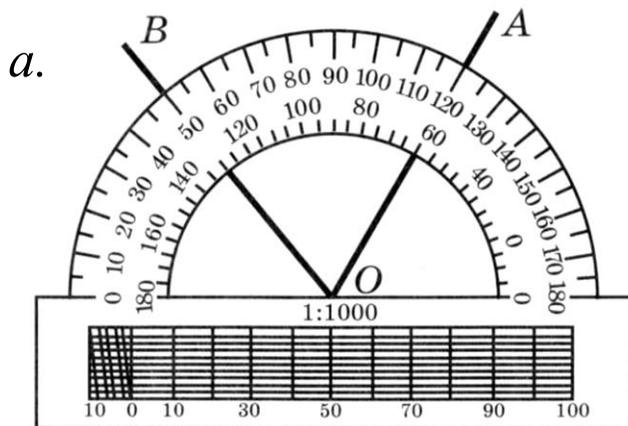


1. Copy the picture to your notebook and shade the area where points are more than 2 cm from point O, more than 2 cm from point P and more than 2 cm from point Q.

2. Copy the picture to your notebook and shade the area where points are more than 2 cm from point O, less than 1.5 cm from point P and less than 2 cm from point Q.



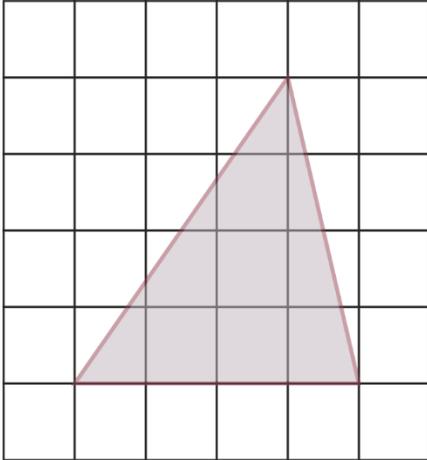
3. Find the measure of angle AOB shown in the diagram.



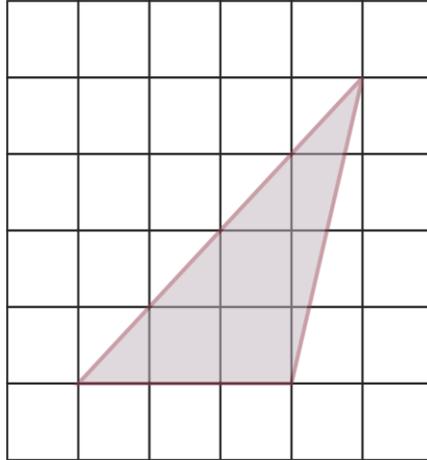
4. Find the area of a triangle (square unit is 1 cm^2 and all vertices are on the nodes of the grid). Check your answer by using the formula for area of a triangle for a and b .

$$S = \frac{1}{2} h_a \cdot a$$

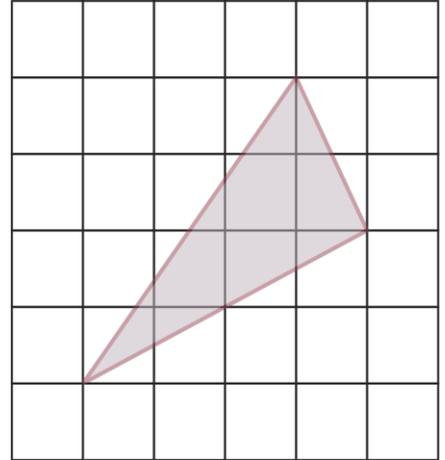
a.



b.



c.



5. Evaluate:

$$\left(1 - \frac{1}{4}\right) \cdot \left(1 - \frac{1}{9}\right) \left(1 - \frac{1}{16}\right) \cdot \dots \cdot \left(1 - \frac{1}{100}\right);$$

6. What should the natural numbers a and b be so that the value of the expression $5a + 3b$ is:
- a multiple of 3;
 - a multiple of 5;
 - a multiple of 15;
 - not a multiple of 3;
 - not a multiple of 5.

7. Simplify the expression:

Example: $2x \cdot 3y = 6xy$

- a. $2a \cdot 0.5b$; b. $10a \cdot \frac{1}{2}b$; c. $m \cdot 0.1n \cdot 10$; d. $-6z \cdot (2x) \cdot y$
- e. $6a(ab)^2b^3$; f. $(xy)^2 \cdot (xy)^3$; g. $-c \cdot (cd)^2$; h. $-z \cdot (-x)^2 \cdot (-xz)$

8. It is known that 2% of the natural number A is greater than 3% of the natural number B. Is it true that 5% of A is greater than 7% of B?