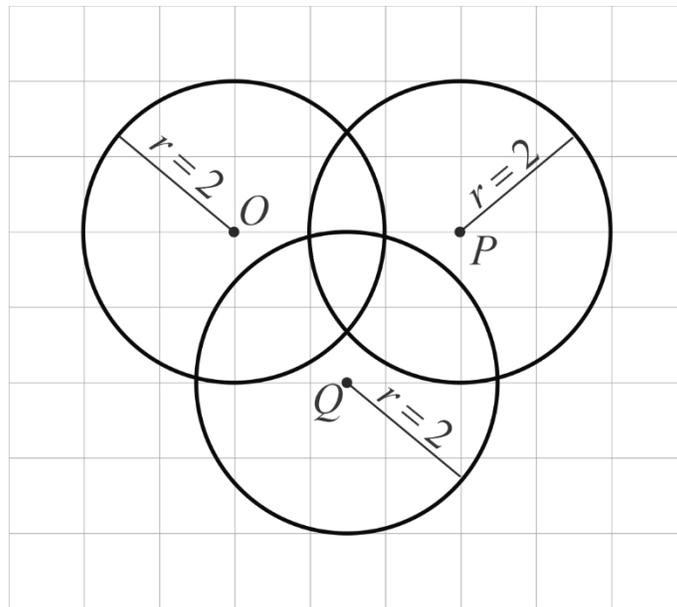


Math 5b, homework 17.

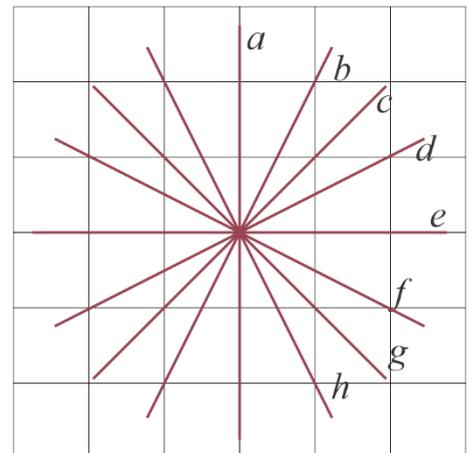


1. Copy the picture to your notebook and shade the area where points are less than 2 cm from point O, less than 2 cm from point P and less than 2 cm from point Q (radii of all circles are 2 cm).
2. Copy the picture to your notebook and shade the area where points are less than 2 cm from point O, less than 2 cm from point P and more than 2 cm from point Q.
3. Copy the picture to your notebook and shade the area where points are less than 2 cm from point O, more than 2 cm from point P and more than 2 cm from point Q.



4. Which of the lines shown in the figure is perpendicular to the line:

a. a; *b. b;* *c. c;* *d. d?*



5. Without doing any calculations, explain why the following inequalities are true.

a. $0 \cdot \left(-5\frac{1}{3}\right) < 3.\bar{4} \cdot 5.1$;

b. $(-12.98) \cdot 0 > 5.\bar{8} \cdot (-4.6)$;

c. $2.\bar{5} \cdot \left(-2\frac{1}{13}\right) < 3.\bar{4} \cdot 5.\bar{1}$;

d. $(5.\bar{6} - 5.\bar{6}) \cdot 13 > -6.7 \cdot 8.9$

e. $(-3.\bar{7} + 3.\bar{7}) \cdot 8.98 < -8.1 \cdot \left(-4\frac{1}{7}\right)$

6. Numbers a and b are both negative, and $|a| < |b|$. Compare:

a. a and 0 ;

b. $-b$ and 0 ,

c. $-b$ and a ;

d. b and $-a$;

e. $-b$ and $-a$,

c. a and $|b|$;

7. Write without parenthesis:

a. $\frac{1}{4}(4x - 16)$;

b. $-\frac{1}{3}(3z + 12)$;

c. $(2x - 3y) \cdot (-3)$;

d. $2m(m - n)$;

e. $2x(a + 3b - c)$

f. $-c(x - 2y + 3z)$

8. Let the sum of three consecutive natural numbers be N . Find the sum of the next three natural numbers.

9. Write as a power:

a. $((x^2)^3)^2$;

b. $(-(-x)^2)^3$;

c. $(-(-x)^3)^2$;

d. $-((-x)^3)^2$

10. Evaluate:

a. $\frac{12.75 \cdot \frac{4}{25} \cdot 1.8}{1\frac{1}{2} \cdot 2.04}$: 20 (answer 24);