Math 5b, homework 22



 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.



2. Mark all points that are equidistant from points A and B (use grid, you don't need to use compass, but use ruler!).



- 3. After walking $\frac{1}{3}$ the length of the bridge, the donkey Eeyore noticed a car approaching at a speed of 60 km/h. If the donkey runs back, he will meet the car at the beginning of the bridge; if he runs forward, the car will catch up with him at the end of the bridge. What is the speed of the donkey Eeyore?
- 4. Two square carpets were brought into a large square hall, with one carpet's side being twice as long as the other. When the carpets were placed in opposite corners of the hall, they covered 4 square meters in two layers, and when they were placed in adjacent corners, they covered 14 square meters. What are the dimensions of the hall?

- 5. Three salt solutions with identical weights were mixed together. The concentration of salt in the first solution is 18% (meaning 18% of the total weight is the weight of salt), and the concentration in the second solution is 7%. What is the concentration of the third solution if the concentration of the mixture is 10%?
- 6. Simplify the following expressions (use the distributive property, combine like terms):

a. $5(a+2) - 12;$	b. $2(m-n) - (m+n);$	c. $3(b-1) - 2(b-2);$
<i>d</i> . $9 - 2(-c + 4);$	<i>e</i> . $(x - y) - 2(x + y);$	f2(d+3)+3(2-d);
g. $m - 3(2 - m) + 8;$	h2(a + b) + 2(a - b);	<i>i</i> . $5y - 2(y - 1) + 3(-y - 4)$

7. What is the measure of angles on the pictures below?









