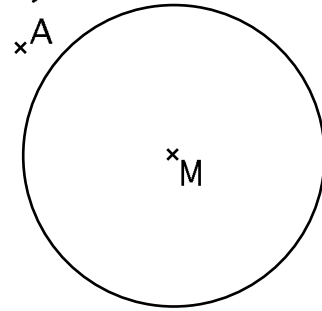
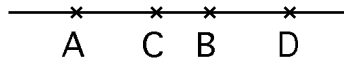
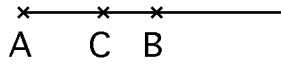


Lösungen zum Aufgabenblatt für den 20.10.2004

1. a) z.B.

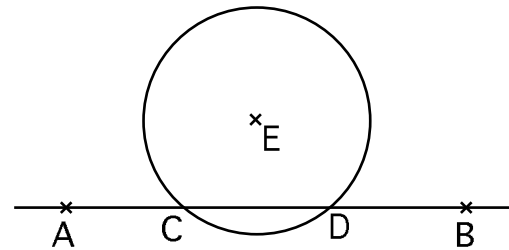
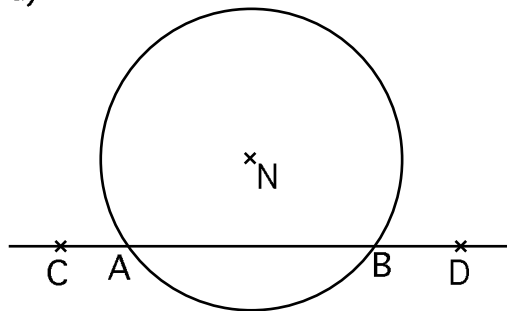
b) z.B.

c) z.B.



d) z.B.

e) z.B.

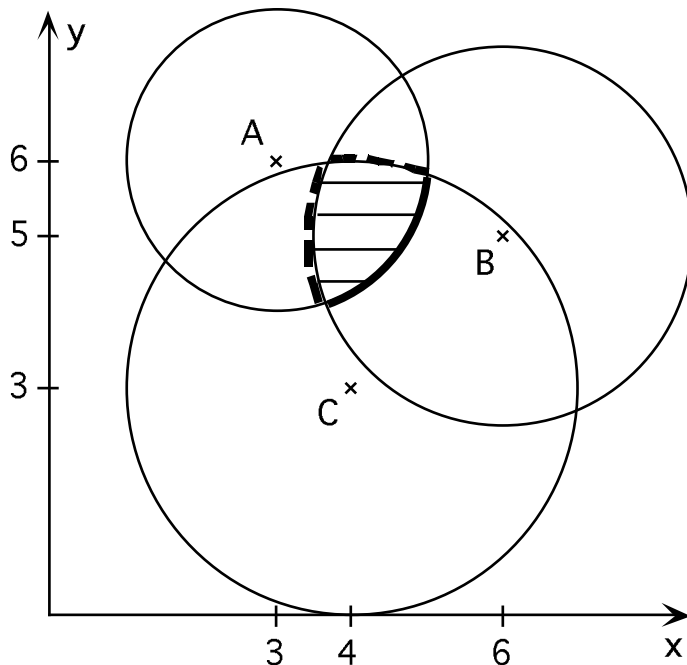


2. a) $\{P \mid \overline{CP} < 1,75\text{cm}\} \cap \{P \mid \overline{BP} = 1,5\text{cm}\}$ b) $k_i(C; 1,75\text{cm}) \cap k(B; 1,5\text{cm})$

c) $\{P \mid \overline{AP} < 1,25\text{cm}\} \cup \{P \mid \overline{BP} < 1,5\text{cm}\} \setminus \{P \mid \overline{CP} < 1,75\text{cm}\}$

d) $k_i(A; 1,25\text{cm}) \cup k_i(B; 1,5\text{cm}) \setminus k_i(C; 1,75\text{cm})$

3.



4. a) $-\left(\frac{350}{210} - \frac{210}{350}\right) = -\left(\frac{5}{3} - \frac{3}{5}\right) = -\left(\frac{25}{15} - \frac{9}{15}\right) = -\frac{16}{15} = -1\frac{1}{15}$

b) $\left(-\frac{3}{4}\right) - \left\{ \left[\left(+\frac{1}{3}\right) + \left(+\frac{1}{6}\right) \right] - \left[\left(+\frac{11}{12}\right) + \left(-\frac{1}{6}\right) \right] \right\} = \left(-\frac{3}{4}\right) - \left\{ \left[\frac{1}{3} + \frac{1}{6} \right] - \left[\frac{11}{12} - \frac{1}{6} \right] \right\} = \left(-\frac{3}{4}\right) - \left\{ \left[\frac{2}{6} + \frac{1}{6} \right] - \left[\frac{11}{12} - \frac{2}{12} \right] \right\}$
 $= \left(-\frac{3}{4}\right) - \left\{ \frac{1}{2} - \frac{3}{4} \right\} = \left(-\frac{3}{4}\right) - \left\{ -\left(\frac{3}{4} - \frac{2}{4}\right) \right\} = \left(-\frac{3}{4}\right) - \left(-\frac{1}{4}\right) = \left(-\frac{3}{4}\right) + \left(\frac{1}{4}\right) = -\left(\frac{3}{4} - \frac{1}{4}\right) = -\frac{1}{2}$

c) $\left| -\left(\frac{1}{24} + \frac{2}{3}\right) \right| + \left(-\frac{7}{12}\right) + \left(-\frac{1}{4}\right) = \left| -\left(\frac{1}{24} + \frac{16}{24}\right) \right| + \left(-\left(\frac{7}{12} + \frac{3}{12}\right)\right) = \left| -\frac{17}{24} \right| + \left(-\frac{10}{12}\right) = \frac{17}{24} + \left(-\frac{20}{24}\right) = -\frac{3}{24} = -\frac{1}{8}$