6. Vektorska algebra - Rješenja

1. $2\sqrt{10-3\sqrt{3}}$
2. $y=\frac{3}{5},\ z=\frac{1}{5}$
3. $\overrightarrow{AB}_{\overrightarrow{CD}}=-\frac{9}{14}\,(2\vec{i}+\vec{j}+3\vec{k}),\ d=\frac{9}{\sqrt{14}}$
4. $\vec{a}=-3\vec{c}-\vec{d}$
5. (a) $\vec{n}=2\,\vec{p}-\frac{1}{3}\,\vec{q}$;
   (b) $\vec{n_0}=\frac{2}{\sqrt{13}}\,\vec{p}-\frac{1}{3\sqrt{13}}\,\vec{q}$.
6. $\vec{b}=(-4,2,-4)$
7. (a) $\lambda=7$;
   (b) $\vec{d}=(-21,-14,-7)$.
8. $\frac{\sqrt{59}}{2}$
9. $2\sqrt{6}$
10. $P=19\sqrt{3},\ v_C=\frac{19\sqrt{3}}{\sqrt{13}}$
11. $P=7\sqrt{5},\ v_B=\frac{2}{3}\sqrt{21}$
12. $\frac{3\sqrt{2}}{2}$
13. (a) $\frac{\sqrt{3}}{2}$;
   (b) $d_1=\sqrt{3},\ d_2=1$.
14. (a) $|6\alpha^3-2\alpha+4|$;
   (b) $\alpha=-1$.
15. 8
17. $\vec{d}=(-4,2,-4)$.