## 参考答案

1-6、ABDDBC

7, 6 8, 1:2 9, AB 10,  $\vec{0}$ 

15.  $(0,\sqrt{3})$  16.  $\frac{\sqrt{2}-1}{2}$  17. 2 18.  $y = x^2 - 3x + 19$ 

19,  $2\sqrt{2} + 2\sqrt{3}$ 

20、(1)  $y = x^2 - 2x - 2$ , 顶点(1,-3); (2)  $2 + 2\sqrt{5}$ 

21, (1)  $4\sqrt{5}$  #; (2)  $2\sqrt{5}$  #

22, (1)  $B_1(1,\sqrt{3})$ ,  $\angle A_1OB_1 = 60^\circ$ ; (2)  $4\sqrt{3}$ 

23、证明略

24, (1) (0,0); (2) a < 0,  $x \le -\frac{1}{2}$ ; (3)  $\pm \frac{2\sqrt{3}}{3}$ 

25, (1)  $S = 13k^2$ ; (2)  $y = \begin{cases} \alpha, 0 < \alpha < 144^{\circ} \\ 180^{\circ} - \alpha, 144^{\circ} < \alpha < 180^{\circ} \end{cases}$ ; (3)  $36^{\circ}$ ,  $72^{\circ}$ ,  $108^{\circ}$ ,  $162^{\circ}$