ex.7, $a, b \in N$

1) 已知 $\sqrt{28+6\sqrt{3}} = \sqrt{a} + \sqrt{b}$, 求 a, b?

$$= \sqrt{28 + 2\sqrt{27}}$$

$$\Rightarrow \begin{cases} a+b=28 \\ ab=27 \end{cases}$$

$$\Rightarrow \begin{cases} a=1, b=27 \\ a=27, b=1 \end{cases}_{\#}$$

2) 解 $\sqrt{3}x^2 + (3\sqrt{3}-1)x - 3 = 0$

$$\Rightarrow (\sqrt{3}x-1)(x+3) = 0$$

$$\Rightarrow x = -3 \text{ or } \frac{1}{\sqrt{3}} \#$$