문제 3.3 (그림은 교재 참조)

(1) $\sin A = \sin(\angle B'A'C')$

$$= \frac{\overline{B'C'}}{\overline{A'B'}}$$

$$= \frac{\frac{\overline{B'C'}}{\overline{CB'}}}{\frac{\overline{A'B'}}{\overline{OB'}}}$$

$$= \frac{\sin(\angle B'OC')}{\sin(\angle B'OA')}$$

$$= \frac{\sin(\angle BOC)}{\sin(\angle BOA)}$$

$$= \frac{\sin a}{\sin c}$$

(2)

$$\begin{cases} \sin B = \dfrac{\sin d}{\sin c} \\ \sin C = \dfrac{\sin d}{\sin b} \end{cases}$$

$$\Rightarrow \sin B \sin c = \sin d = \sin C \cdot \sin b$$

$$\Rightarrow \frac{\sin b}{\sin B} = \frac{\sin c}{\sin C}$$