Formula Glossary
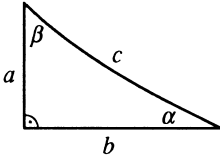
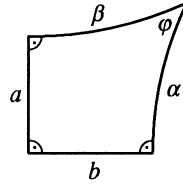## 2.2.2 Right-angled triangles

(i) $\cosh c = \cosh a \cosh b$,
(ii) $\cosh c = \cot \alpha \cot \beta$,
(iii) $\sinh a = \sin \alpha \sinh c$,
(iv) $\sinh a = \cot \beta \tanh b$,
(v) $\cos \alpha = \cosh a \sin \beta$,
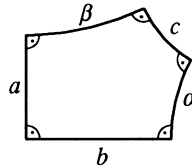(vi) $\cos \alpha = \tanh b \coth c$.

2.3.1 Trirectangles

(i) $\cos \varphi = \sinh a \sinh b$,
(ii) $\cos \varphi = \tanh \alpha \tanh \beta$,
(iii) $\cosh a = \cosh \alpha \sin \varphi$,
(iv) $\cosh a = \tanh \beta \coth b$,
(v) $\sinh \alpha = \sinh a \cosh \beta$,
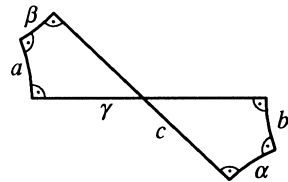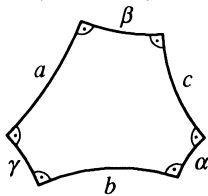(vi) $\sinh \alpha = \coth b \cot \varphi$.

2.3.4 Right-angled pentagons

(i) $\cosh c = \sinh a \sinh b$,
(ii) $\cosh c = \coth \alpha \coth \beta$.

2.4.1 Right-angled hexagons

(i) $\cosh c = \sinh a \sinh b \cosh \gamma - \cosh a \cosh b$,
(ii) $\sinh a : \sinh \alpha = \sinh b : \sinh \beta = \sinh c : \sinh \gamma$,
(iii) $\coth \alpha \sinh \gamma = \cosh \gamma \cosh b - \coth a \sinh b$.

2.4.4 Crossed right-angled hexagons

$$\cosh c = \sinh a \sinh b \cosh \gamma + \cosh a \cosh b.$$

2.2.1 Triangles

(i) $\cosh c = -\sinh a \sinh b \cos \gamma + \cosh a \cosh b$,
(ii) $\cos \gamma = \sin \alpha \sin \beta \cosh c - \cos \alpha \cos \beta$,
(iii) $\sinh a : \sin \alpha = \sinh b : \sin \beta = \sinh c : \sin \gamma$.