

$$27.1 \quad (\sin u)' = \cos u \cdot u'$$

$$(\cos u)' = -\sin u \cdot u'$$

$$27.2 \quad (\sec u)' = \sec u \cdot \tan u \cdot u'$$

$$(\csc u)' = -\csc u \cot u \cdot u'$$

$$(\tan u)' = \sec^2 u \cdot u'$$

$$(\cot u)' = -\csc^2 u \cdot u'$$

$$27.3 \quad (\sin^{-1} u)' = \frac{1}{\sqrt{1-u^2}} u'$$

$$(\cos^{-1} u)' = -\frac{1}{\sqrt{1-u^2}} u'$$

$$(\tan^{-1} u)' = \frac{1}{1+u^2} u'$$

$$27.5 \quad (\ln u)' = \frac{1}{u} u'$$

$$27.6 \quad (e^u)' = e^u u'$$

27.7 L'Hopital's Rule

28.1 Integration with General Power Rule