

EXERCISE XVII.

2. $(-1 \pm \sqrt{1+4c^2}) / 2c$. 3. $\pm \sqrt{\frac{1-c}{1+c}}$
 6. $ab \cdot \frac{b^2-a^2}{b^2+a^2}$. 7. $\frac{1}{2} \cdot \frac{ab^3}{a^2+b^2}$. 8. $\frac{1}{2} \cdot \frac{a^3b^3}{(a^2+b^2)^2}$.

EXERCISE XVIII.

1. (a) 9.33660. (b) 9.83131. (c) 6.98070.
 (d) 5.12237. (e) $17^\circ 12' 51''$. (f) 0.004587.
 (g) $4' 45''$. 54.
 3. $60^\circ 2'$. 7. $36^\circ 36'$. 8. 194.28.
 9. $A=60^\circ 18'$, $B=41^\circ 32'$. 10. 0.3233.

EXERCISE XIX.

1. $\tan^{-1} \frac{3}{4}$.

MISCELLANEOUS EXERCISES.

2. (a) $\sin \theta = \frac{3}{5}$ or 1. (b) $\sin \theta = \frac{5}{13}$ or $\frac{3}{5}$.
 (c) $\tan \theta = \frac{5}{12}$. (d) $\sin \theta = 1$ or $-\frac{3}{5}$.
 (e) $\theta = 90^\circ$ or $7^\circ 30'$.
 4. $m \cdot \frac{\cos \alpha \sin \beta}{\sin(-\alpha)}$. 5. (b) 28.28.
 8. (a) $\frac{A}{2} - \cos^{-1} \left[\frac{m}{2} \sec \frac{A}{2} \right]$ and $\frac{A}{2} + \cos^{-1} \left[\frac{m}{2} \sec \frac{A}{2} \right]$.
 10. 18° , 126° , 2.1028, 5.5066.
 11. Sides $b, c = 2m \sin \alpha / \sin(\alpha + \beta)$, $2m \sin \beta / \sin(\alpha + \beta)$.