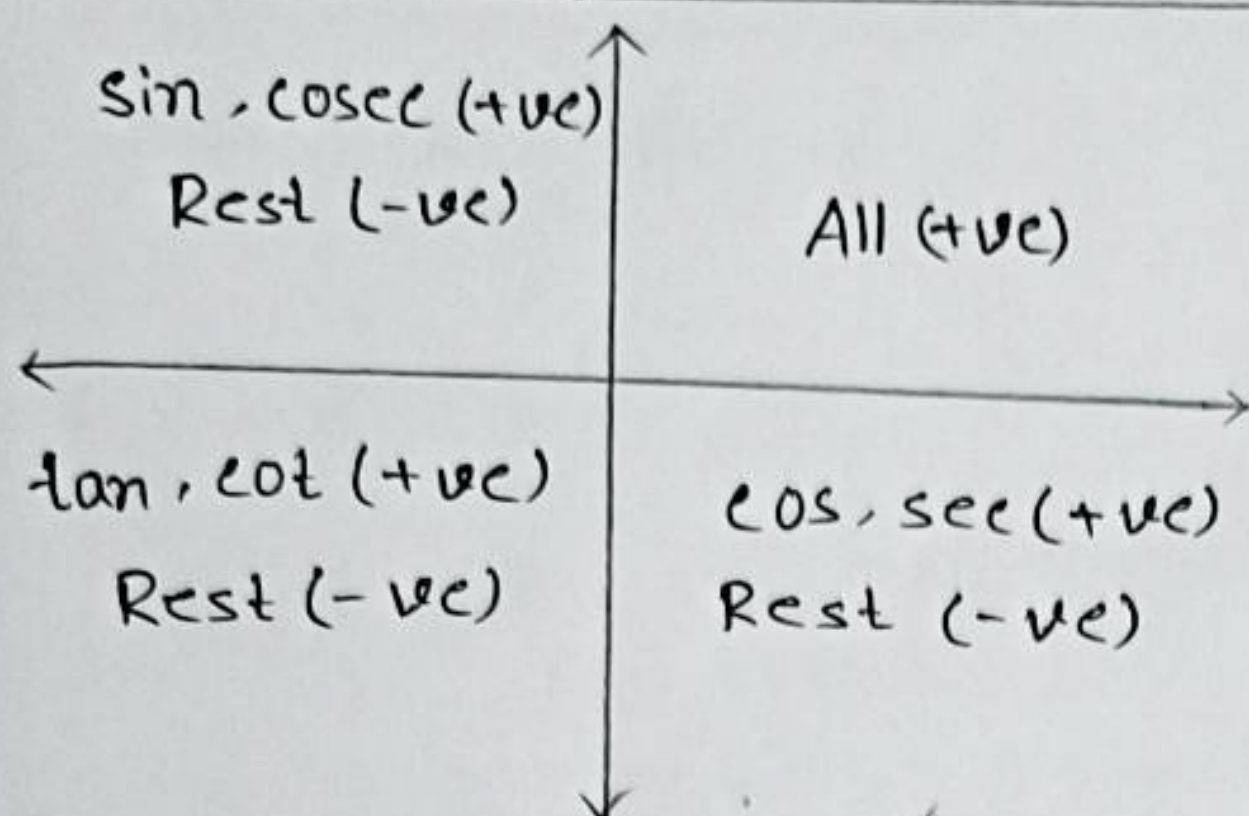


Sign of Trigonometric Ratios



'All', 'sin', 'tan', 'cos'
RULE

- (1) $\sin(-\theta) = -\sin \theta$
- (2) $\cos(-\theta) = \cos \theta$
- (3) $\tan(-\theta) = -\tan \theta$

Trigonometric Rules of Compound Angles

- (1) $\sin(A+B) = \sin A \cdot \cos B + \cos A \cdot \sin B$
- (2) $\sin(A-B) = \sin A \cdot \cos B - \cos A \cdot \sin B$
- (3) $\cos(A+B) = \cos A \cdot \cos B - \sin A \cdot \sin B$
- (4) $\cos(A-B) = \cos A \cdot \cos B + \sin A \cdot \sin B$
- (5) $\sin(A+B) \cdot \sin(A-B) = \sin^2 A - \sin^2 B$
 $= \cos^2 B - \cos^2 A$
- (6) $\cos(A+B) \cdot \cos(A-B) = \cos^2 A - \sin^2 B$
 $= \cos^2 B - \sin^2 A$
- (7) $\tan(A+B) = \frac{\tan A + \tan B}{1 - \tan A \cdot \tan B}$
- (8) $\tan(A-B) = \frac{\tan A - \tan B}{1 + \tan A \cdot \tan B}$
- (9) $\tan(A+B+C)$
 $= \frac{\tan A + \tan B + \tan C - \tan A \cdot \tan B \cdot \tan C}{1 - \tan A \cdot \tan B - \tan B \cdot \tan C - \tan C \cdot \tan A}$