

EXERCISE 1 – Identifying Quadrants

1) In each case, indicate in which quadrant the angle lies:

- | | | | |
|-------------------|-------------------|-------------------|-------------------|
| 1.1) 223° | 1.2) 153° | 1.3) 292° | 1.4) -130° |
| 1.5) -400° | 1.6) -51° | 1.7) -182° | 1.8) 225° |
| 1.9) 520° | 1.10) 730° | | |

2) Determine whether each of the following ratios will be positive or negative:

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|--------------------------|--------------------------|-------------------------|
| 2.1) $\cos 115^\circ$ | 2.2) $\tan 150^\circ$ | 2.3) $\cos (-40^\circ)$ |
| 2.4) $\sin (-30^\circ)$ | 2.5) $\tan (-170^\circ)$ | 2.6) $\sin 200^\circ$ |
| 2.7) $\cos 330^\circ$ | 2.8) $\tan 190^\circ$ | 2.9) $\sin 300^\circ$ |
| 2.10) $\cos (-60^\circ)$ | | |

3) In each case, indicate in which quadrant θ lies:

- 3.1) $\sin \theta > 0$ & $\cos \theta < 0$
- 3.2) $\sin \theta < 0$ & $\cos \theta > 0$
- 3.3) $\sin \theta > 0$ & $\tan \theta < 0$
- 3.4) $\cos \theta > 0$ & $\tan \theta > 0$
- 3.5) $\cos \theta > 0$ & $\tan \theta < 0$
- 3.6) $\sin \theta < 0$ & $\tan \theta > 0$