10 Problems Concerning Reference Angles (Part 1 of 2)
(Part 1)

PROBLEMS

Give the reference angle for each of the following angles. Show how you found your answer, including a picture of the angles in the *x-y* plane.

1. 150°   2. 225°

3. 300°   4. 120°

5. 210°   6. 135°

7. −120°   8. −330°

9. −315°   10. −225°

ANSWERS

1. 30°	2. 45°
3. 60°	4. 60°
5. 30°	6. 45°
7. 60°	8. 30°
9. 45°	10. 45°

SELECTED SOLUTIONS

1. 150°

150°

REFERENCE ANGLE → 30°

y

x
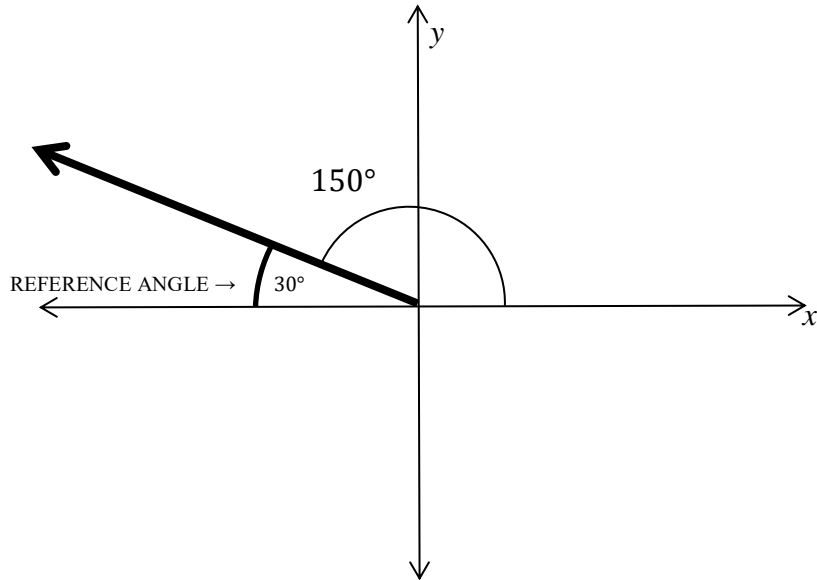
For an angle of 150° in standard position, the reference angle is $180° - 150° = 30°$.

3. 300°

300°

60° ← REFERENCE ANGLE

y

x
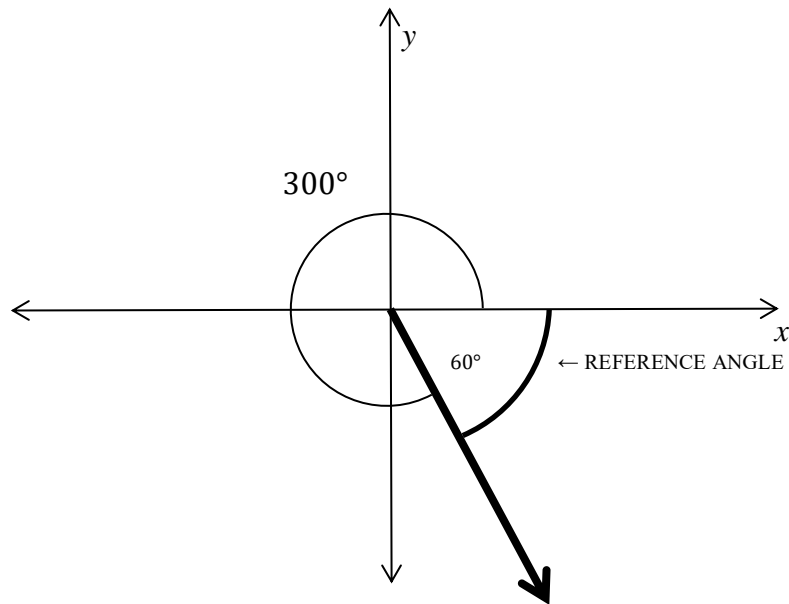
For an angle of 300° in standard position, the reference angle is $360° - 300° = 60°$.