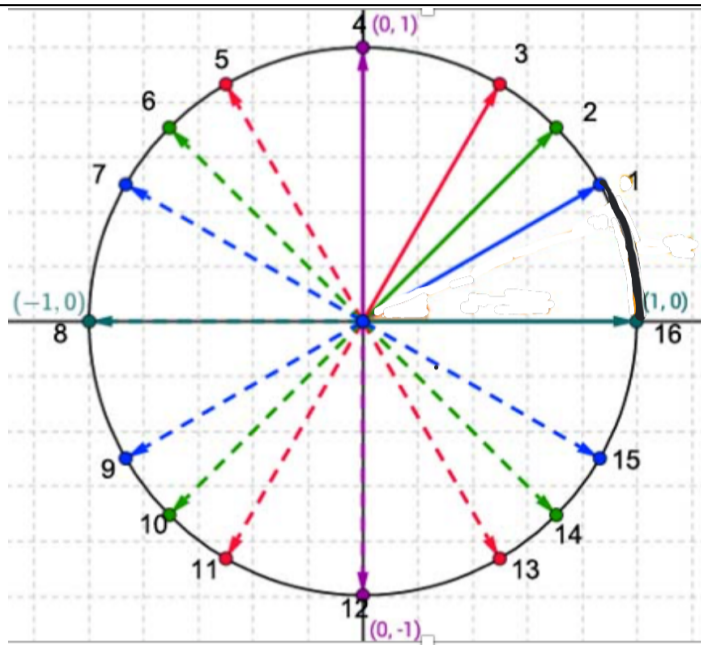Angle Worksheet 3 -Special Angles Handout – Mixed

Given that all the "blue angles" have a reference angle of 30 degrees or $\pi/6$ radians, write the angle measures, both in radians AND degrees, for each of the blue angles.

1) _____ 30° _____ $\pi/6$ _____

7) _____ 150° _____ $5\pi/6$ _____

9) _____ 210° _____ $7\pi/6$ _____

15) _____ 330° _____ $11\pi/6$ _____

Given that all the "green angles" all have a reference angle of 45 degrees or $\pi/4$ radians, write the angle measures, both in radians AND degrees, for each of the green angles.

2) _____ 45° _____ $\pi/4$ _____

6) _____ 135° _____ $3\pi/4$ _____

10) _____ 225° _____ $5\pi/4$ _____

14) _____ 315° _____ $\dfrac{7\pi}{4}$ _____

Given that all the "red angles" have a reference angle of 60 degrees or $\pi/3$ radians, write the angle measures, both in radians AND degrees, for each of the red angles.
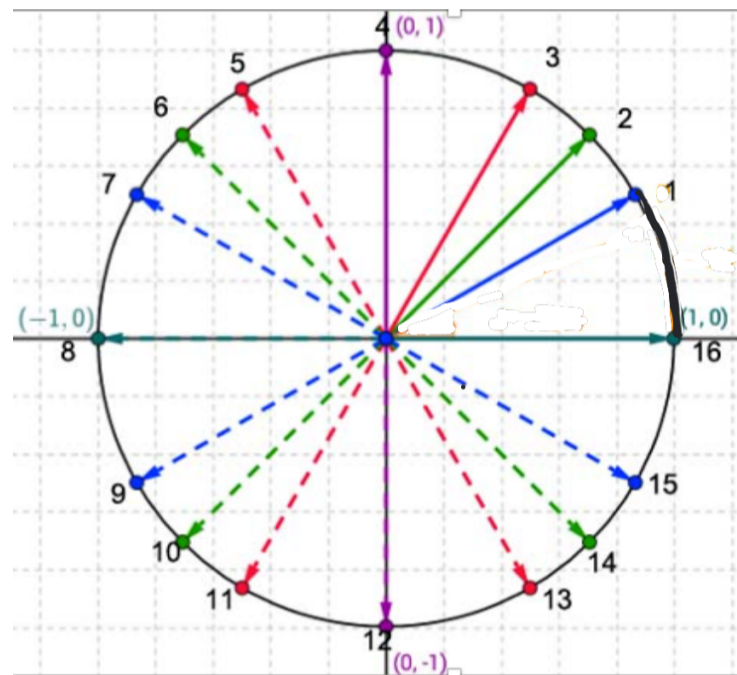
3) _____ 60° _____ $\pi/3$ _____

5) _____ 120° _____ $2\pi/3$ _____

11) _____ 240° _____ $4\pi/3$ _____

13) _____ 300° _____ $5\pi/3$ _____

(worksheet cont'd next page)

(worksheet cont'd)

Special Angles Worksheet -Mixed

The "blue angles" all have a reference angle of 30 degrees or $\pi/6$ radians.
The "green angles" all have a reference angle of 45 degrees or $\pi/4$ radians.
The "red angles" all have a reference angle of 60 degrees or $\pi/3$ radians.

Write the corresponding number for each of the following angles. (Challenge yourself...You need to get *quick* at this)

$2\pi/3$ **5**	$7\pi/6$ **9**	135° **6**
$7\pi/4$ **14**	210° **9**	$5\pi/6$ **7**
$5\pi/3$ **13**	$-\pi/4$ **14**	300° **13**
$-270°$ **4**	$3\pi/2$ **12**	$5\pi/2$ **4**
$15\pi/4$ **14**	$-7\pi/6$ **7**	225° **10**
$-135°$ **10**	$4\pi/3$ **11**	315° **14**
$2\pi/3$ **5**	$7\pi/6$ **9**	135° **6**
180° **8**	$5\pi/4$ **10**	13π **8**
150° **7**	4π **16**	$3\pi/4$ **6**