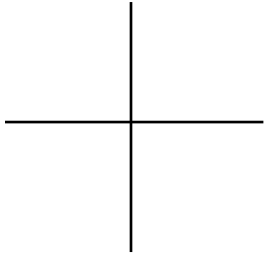
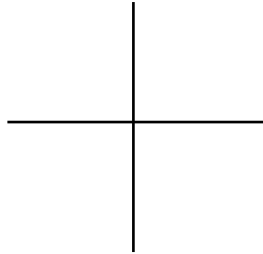


I. Sketch each of the following angles in standard position.

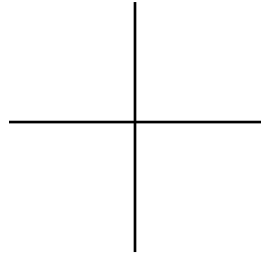
1. 150°



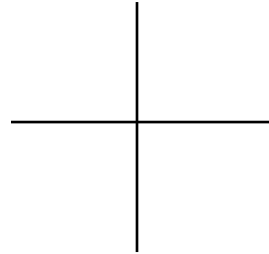
2. -120°



3. $-\frac{7\pi}{4}$



4. $\frac{2\pi}{3}$



II. Determine the quadrant in which the terminal side of the angle lies.

5. 130° _____

6. -336° _____

7. 285° _____

8. -260° _____

9. $\frac{22\pi}{3}$ _____

10. $\frac{7\pi}{5}$ _____

III. Express each of the following in radian measure. Leave your answer in terms of π .

11. 150° _____

12. 315° _____

13. -240° _____

IV. Express each of the following in degree measure.

14. $\frac{5\pi}{9}$ _____

15. $-\frac{7\pi}{12}$ _____

16. $\frac{11\pi}{5}$ _____

V. Find the reference angle for each of the following.

17. $\frac{7\pi}{4}$ _____

18. $\frac{14\pi}{5}$ _____

19. 208° _____

20. -445° _____