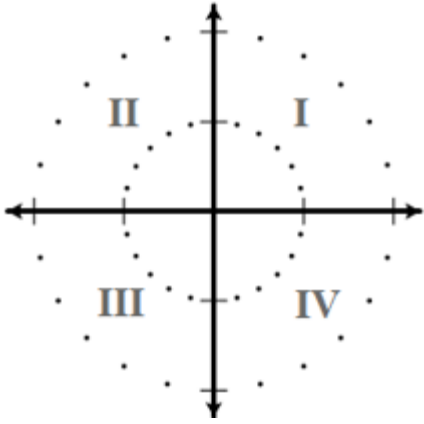
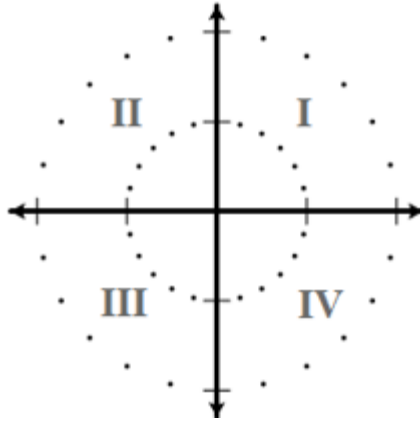


It may help to first review where each of the main trigonometric functions are positive and negative. Indicate the quadrants where each function, is positive and negative.

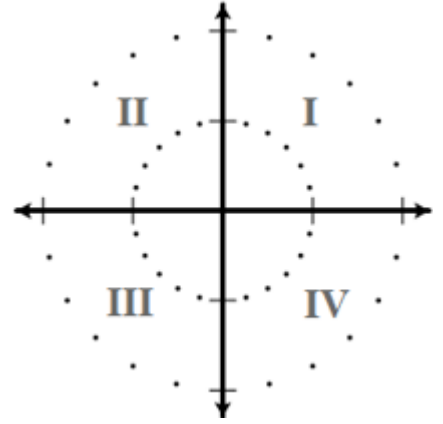
1. $y = \sin(x)$



2. $y = \cos(x)$



3. $y = \tan(x)$

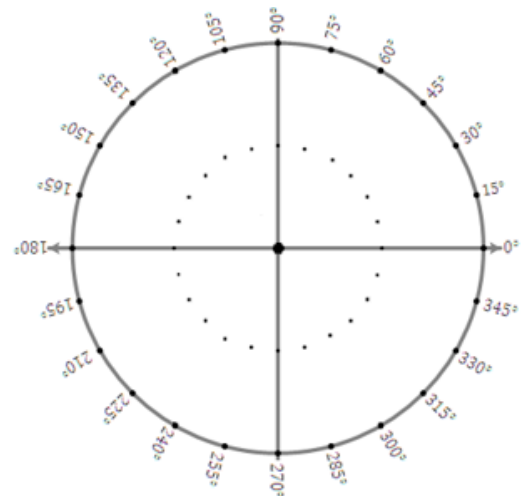
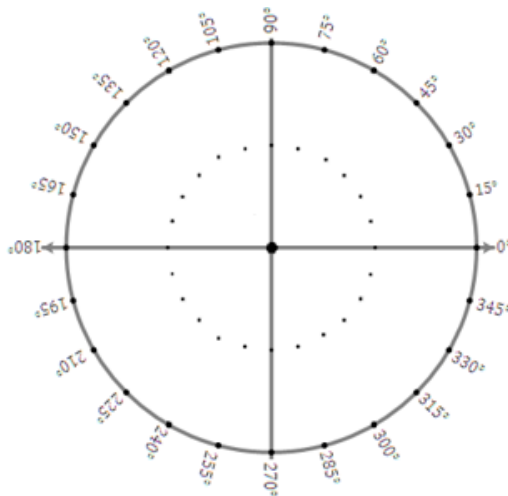
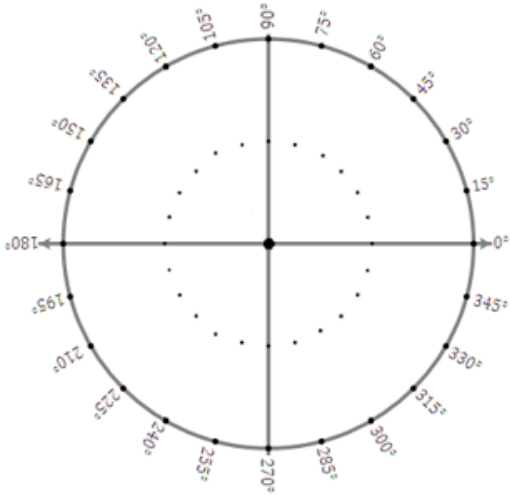


Using special right triangles find all the solutions of θ to the equations in degrees between 0° and 360°

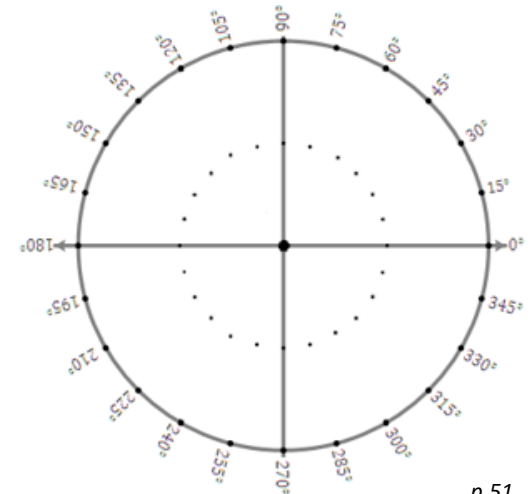
4. $\sin(\theta) = \frac{\sqrt{3}}{2}$

5. $2 \sin(\theta) = -1$

6. $\sqrt{2} \cos(\theta) - 1 = 0$



7. $2\cos(\theta) + \sqrt{3} = 0$

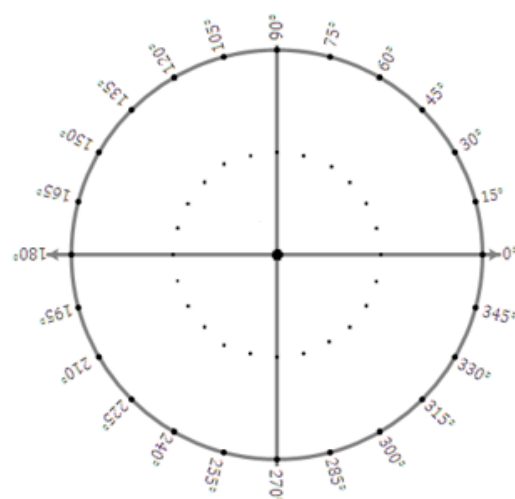
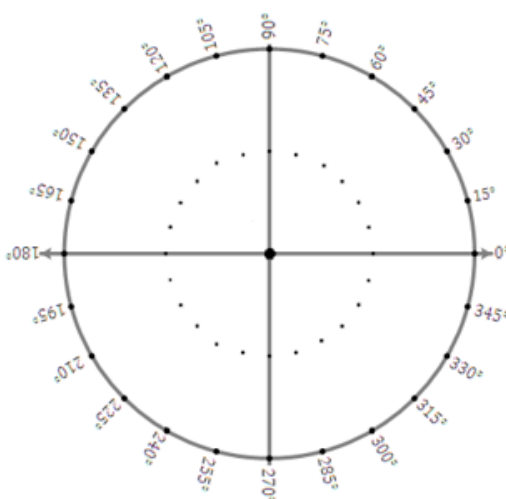
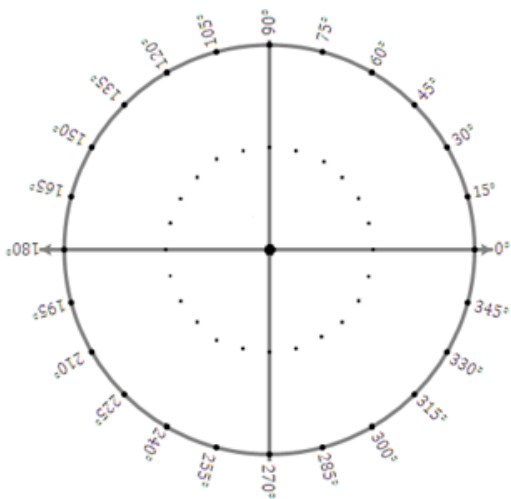


Using the circle find all the solutions of θ to the equations in degrees within the range $0^\circ \leq \theta < 360^\circ$.

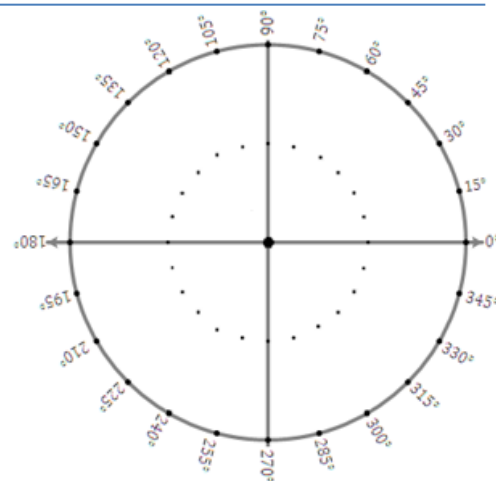
8. $\sqrt{3} \tan(\theta) = -1$

9. $\sin(\theta) = 1$

10. $\cos(\theta) + 1 = 1$



***11. $2\cos(\theta)\sin(\theta) - \sin(\theta) = 0$

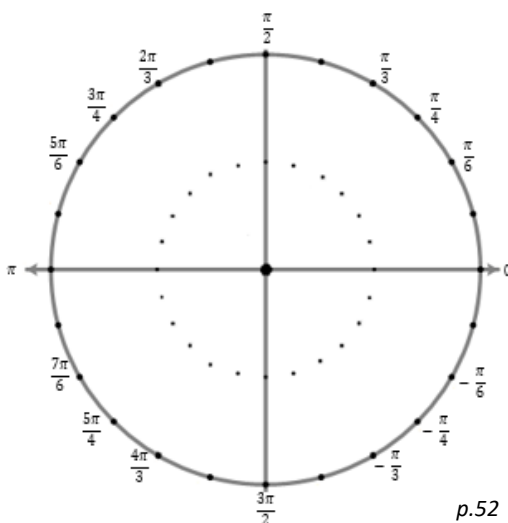
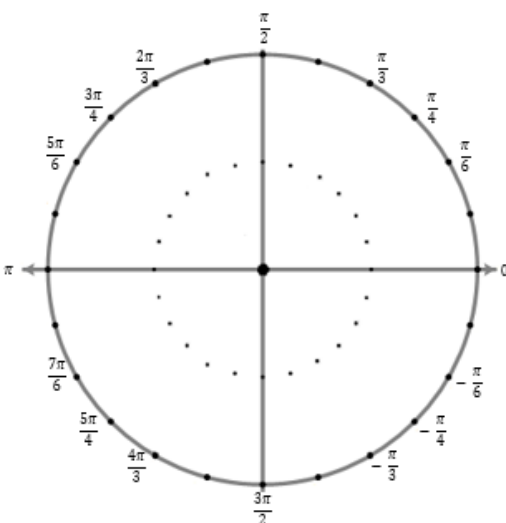
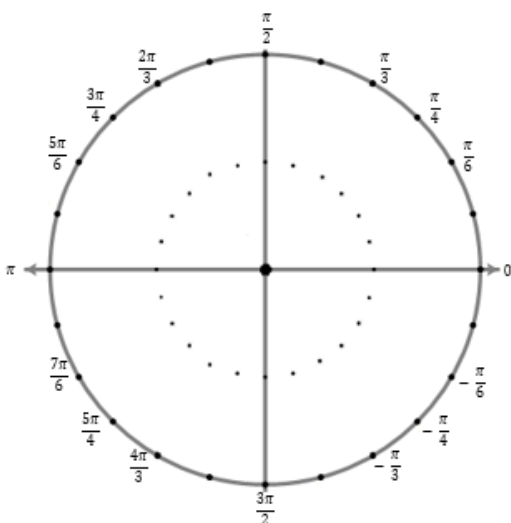


Using the circle find all the solutions of x to the equations in radians within the range $0 \leq x < 2\pi$

12. $\sin(x) = \frac{\sqrt{2}}{2}$

13. $\cos(x) = -\frac{1}{2}$

14. $\tan(x) = 1$

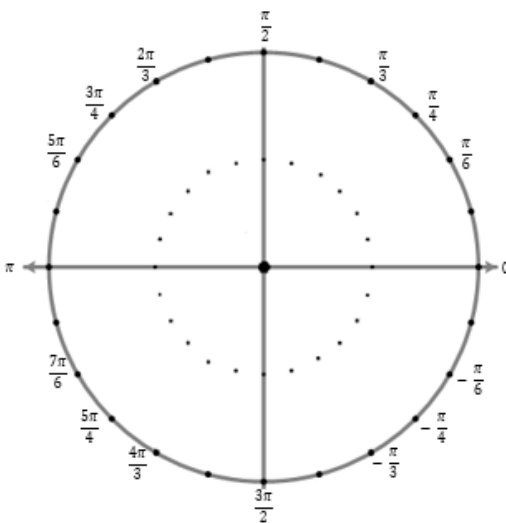
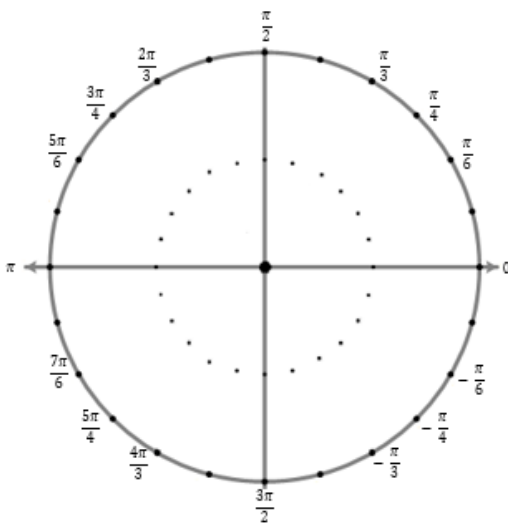
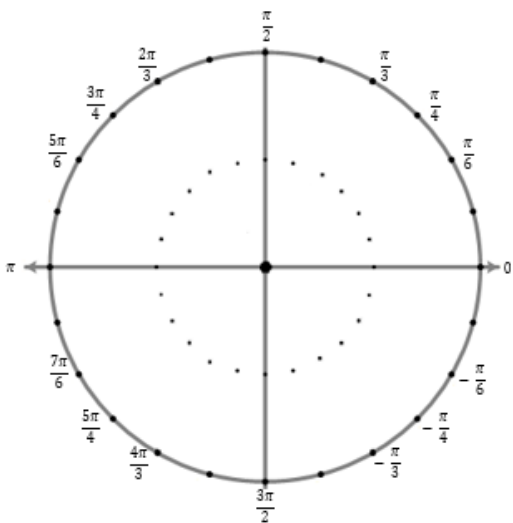


Using the circle find all the solutions of x to the equations in radians within the range $0 \leq x < 2\pi$

15. $2\sin(x) = 1$

16. $\cos(x) = -1$

17. $\tan(x) = \text{undefined}$

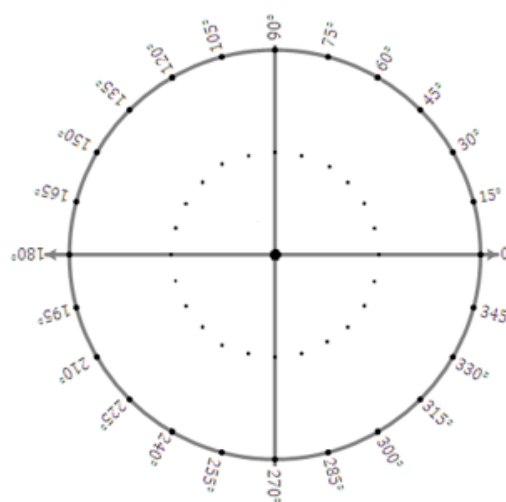
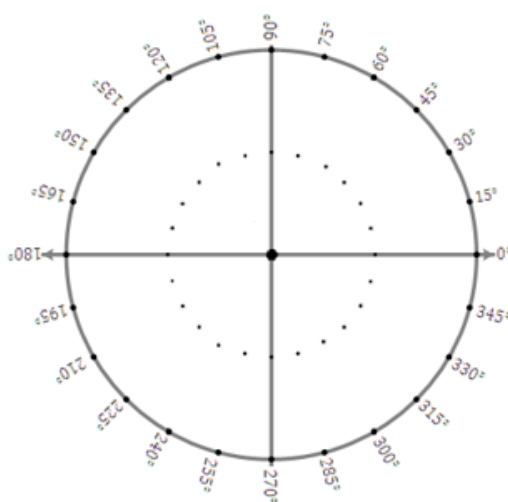
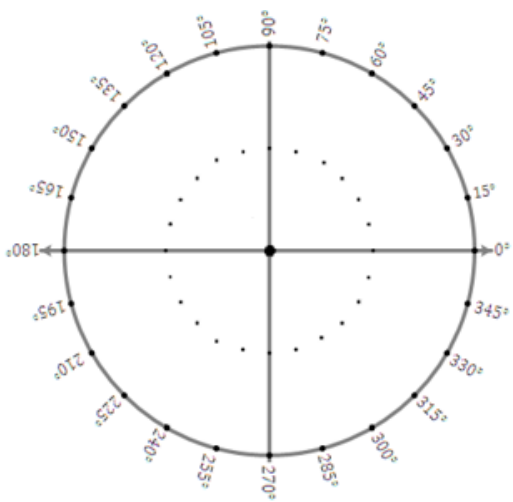


Using the circle find all the solutions of θ to the equations in degrees within the range $0^\circ \leq \theta < 360^\circ$.

18. $\sin(\theta) = 0.78$

19. $\sin(\theta) = -0.41$

20. $\cos(\theta) = 0.32$

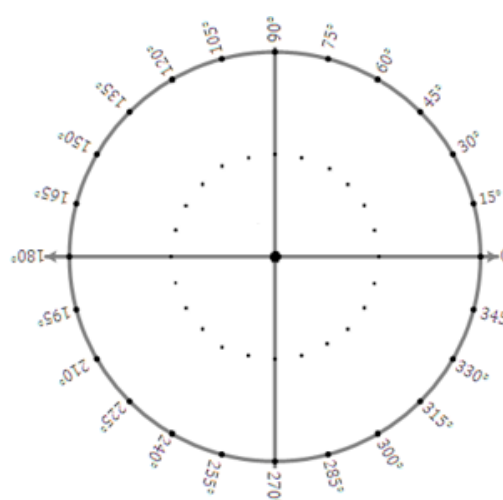
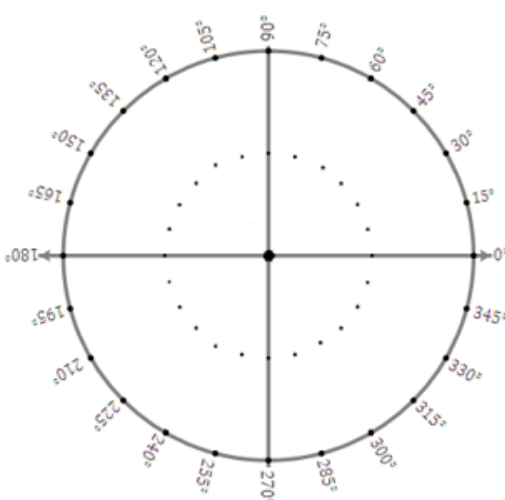
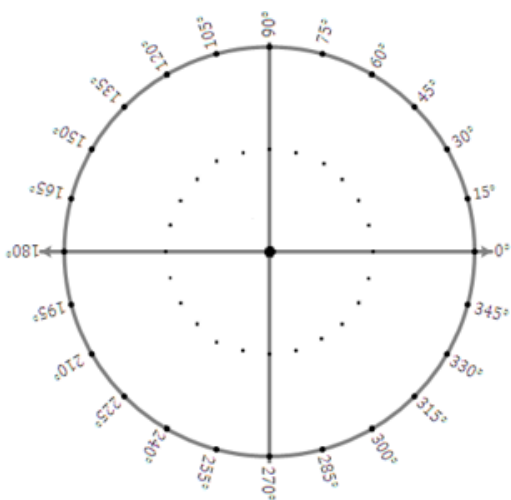


Using the circle find all the solutions of θ to the equations in degrees within the range $0^\circ \leq \theta < 360^\circ$.

21. $\cos(\theta) = -0.24$

22. $\tan(\theta) = 1.41$

23. $\tan(\theta) = -0.87$



Which quadrant, if any, is described by the given constraints?

24. $\sin(x) > 0$ and $\cos(x) < 0$

25. $\cos(x) < 0$ and $\tan(x) < 0$

26. $\sin(x) < 0$ and $\cos(x) > 0$

