Identify Solutions to Trigonometric Equations, when solved over all real numbers

Solve each equation over the domain of all real numbers. Give your answers in radians.

1) $\frac{\sqrt{3}}{2} = \sin\theta$

2) $\tan\theta = \frac{\sqrt{3}}{3}$

3) $\frac{\sqrt{3}}{2} = \cos\theta$

4) $\sin\theta = -\frac{1}{2}$

5) $2\cos\theta = -1$

6) $-4\cos\theta = -2\sqrt{3}$

7) $-\frac{1}{2}\cdot\tan\theta = -\frac{1}{2}$

8) $6\cos\theta = 3\sqrt{2}$

9) $-5 - \frac{3}{4}\cdot\tan\theta = \frac{-20+\sqrt{3}}{4}$

10) $\frac{20-\sqrt{3}}{4} = 5 + \frac{3}{4}\cdot\tan\theta$

11) $-2 - \frac{3}{2}\cdot\tan\theta = \frac{-4+\sqrt{3}}{2}$

12) $\frac{16+\sqrt{3}}{4} = 4 - \frac{3}{4}\cdot\tan\theta$

13) (sin x)^2 + 4sin x = -3

14) 2(cos x)^2 + 3x = -1