**ANSWERS**

1. $θ=\left\{\frac{2π}{3}+2kπ, \frac{4π}{3}+2kπ\right\}$ where $k\in Z$
2. $θ=\left\{0+2kπ\right\}$ where $k\in Z$
3. $θ=\{\frac{π}{12 },\frac{π}{6 },\frac{2π}{3 },\frac{7π}{12 },\frac{7π}{6 },\frac{13π}{12 },\frac{5π}{3 },\frac{19π}{12 }\} $
4. No Solution
5. $x=\{\frac{π}{18}, \frac{11π}{18}, \frac{13π}{18}, \frac{23π}{18}, \frac{25π}{18}, \frac{35π}{18}\}$
6. $x=\{ π\}$
7. $x=\{0, π, \frac{π}{6}, \frac{5π}{6}\}$
8. $x=\{\frac{2π}{3},\frac{4π}{3}, \frac{5π}{3}\}$
9. $x=\{\frac{π}{6}, \frac{7π}{6}\}$
10. $x=\{0,π\}$