

Trigonometric Equations on Bounded Intervals

Find every distinct exact solution in the stated half-open interval. Check endpoints and exclude values where the original expression is undefined.

1. Solve $\sin(x) = -1/2$ for all x in $[0, 2\pi)$.

2. Solve $2 \tan(2x - \pi/6) = 0$ for all x in $[0, 2\pi)$.

Math Sheet

Name _____ Score _____ Teacher _____ Date _____

Trigonometric Equations on Bounded Intervals

Find every distinct exact solution in the stated half-open interval. Check endpoints and exclude values where the original expression is undefined.

3. Solve $-\sin(3x + \pi/4) = -\sqrt{3}/2$ for all x in $[0, 2\pi)$.

4. Solve $\sin(x - \pi/3) = \sqrt{2}/2$ for all x in $[0, 2\pi)$.

Name _____ Score _____ Teacher _____ Date _____

Trigonometric Equations on Bounded Intervals

Find every distinct exact solution in the stated half-open interval. Check endpoints and exclude values where the original expression is undefined.

5. Solve $\cos(2x) = -1/2$ for all x in $[0, 2\pi)$.

6. Solve $2 \tan(3x - \pi/6) = -2\sqrt{3}/3$ for all x in $[0, 2\pi)$.

Trigonometric Equations on Bounded Intervals

Find every distinct exact solution in the stated half-open interval. Check endpoints and exclude values where the original expression is undefined.

7. Solve $\tan(x + \pi/4) = 1$ for all x in $[0, 2\pi)$.

8. Solve $2 \cos(2x - \pi/3) = \sqrt{2}$ for all x in $[0, 2\pi)$.