

Name \_\_\_\_\_

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Write answers in radians unless otherwise directed.

Connect the answer dots in order.

Start a new line.

1. Simplify:  $\sin(45^\circ)$
2. Simplify:  $\sin(-45^\circ)$
3. Simplify:  $\tan(240^\circ)$
4. Simplify: In radians,  $\tan^{-1}(-\sqrt{3})$
5. Simplify: In positive degrees,  $\tan^{-1}(-\sqrt{3})$
6. Simplify:  $\cos(210^\circ)$
7. Solve:  $\cos(x) = -\sqrt{3}/2, [0, 2\pi]$
8. Solve:  $\tan(x) = 1, [0, 2\pi)$
9. Simplify:  $\tan(\pi/2)$
10. Solve:  $\sin(x) = 2$
11. Simplify:  $\cot(150^\circ)$
12. Simplify:  $\csc(\cos^{-1}(1/2))$
13. Simplify:  $\sin(\pi/6)$
14. Simplify:  $\sin^{-1}(\sin(47^\circ))$
15. Simplify:  $\sin(\sin^{-1}(.2))$
16. Write in symbols the "angle whose sine is .3"
17. Simplify: In degrees:  $\sin^{-1}(.5)$
18. State the quadrants in which the sine of an angle is positive.
19. Choose: The cosine is odd or even.
20. When is  $\sec(x)$  undefined?
21. Simplify:  $\tan(\pi/6)$
22. Simplify:  $\tan^{-1}(-\sqrt{3}/3)$
23. Solve:  $3\tan^2(x) - 1 = 0, [\pi, 2\pi]$
24. Solve:  $3\tan^2(x) - 1 = 0, [0, 2\pi)$
25. Solve:  $3\tan^2(x) - 1 = 0$
26. Simplify:  $\tan^{-1}(0)$

Start a new line.

27. Simplify: In degrees:  $\cos^{-1}(\sqrt{3}/2)$
28. Simplify:  $\cos^{-1}(-1)$
29. Simplify:  $\sin(60^\circ)$
30. Simplify:  $\sin^{-1}(\sqrt{3}/2)$
31. Solve:  $\sin(x) = \sqrt{3}/2, [\pi/2, 3\pi/2]$
32. Solve:  $4\sin^2(x) = 3, [0, 2\pi)$
33. Solve:  $4\sin^2(x) = 3$
34. Simplify:  $-\cos^{-1}(-1)$
35. Complete: The tangent is positive in quadrant I and this quadrant.
36. Simplify:  $\sin(-x)$
37. Simplify:  $\cos(-x)$
38. Choose: The sine is odd or even.
39. Rewrite w/a Pythagorean Identity:  $\tan^2(x)$
40. Simplify:  $\cos(0)$
41. All trig functions are positive in this quadrant.
42. Rewrite w/a Pythagorean Identity:  $\cos^2(x) - 1$
43. Simplify:  $\tan(\pi/2 - x)$
44. Simplify:  $\sin(x)/\cos(x)$
45. State the range of the sine function.
46. Simplify:  $\sin(0)$
47. Simplify:  $\tan^{-1}(1)$
48. Simplify:  $\cos(300^\circ)$
- Start a new line.
49. Simplify:  $\tan(\sin^{-1}(\sqrt{2}/2))$
50. State the range of the cosecant.
51. Simplify:  $\cos(120^\circ)$
52. All arcfuctions are positive in this quadrant.
- Start a new line.
53. State the period of the cosine.
54. The arccosine of a negative number is in this quadrant.
55. Simplify:  $\tan^{-1}(\tan(B)), (0, \infty)$
56. Simplify:  $\tan^{-1}(\tan(D)), (-\infty, 0)$

