

**Take the SHORT CUT:****Think: Quadrant? Reference Angle?**

Write each expression in terms of the same function of a first quadrant angle.

Connect the answer dots in order.

$$\bullet \text{ctn}(40^\circ)$$

$$\bullet \text{csc}(79^\circ 10')$$

$$\text{sin}(0^\circ) \bullet$$

$$\begin{array}{ccccccc} & & \bullet \text{cos}(10^\circ) & & & & \\ & \bullet \text{sin}(40^\circ) & & \bullet \text{-sin}(45^\circ) & & & \\ & & \bullet \text{sin}(25^\circ) & & & & \\ \bullet \text{-csc}(55^\circ) & & \bullet \text{-sin}(10^\circ) & & \bullet \text{sec}(20^\circ) & & \\ \bullet \text{-sin}(40^\circ) & \bullet \text{csc}(60^\circ) & & \bullet \text{tan}(10^\circ) & & & \\ \bullet \text{-cos}(80^\circ) & \bullet \text{-tan}(15^\circ) & & \bullet \text{-tan}(5^\circ) & & & \\ \bullet \text{ctn}(28^\circ) & \bullet \text{-tan}(5^\circ 10') & \bullet \text{-csc}(36^\circ) & \bullet \text{-ctn}(30^\circ) & & & \\ \bullet \text{csc}(60^\circ) & \bullet \text{sec}(62^\circ) & & & & & \\ \bullet \text{ctn}(50^\circ) & & \bullet \text{-sec}(70^\circ) & \bullet \text{-cos}(78^\circ) & & & \\ \bullet \text{cos}(65^\circ 10') & \bullet \text{sin}(20^\circ) & \bullet \text{-tan}(83^\circ) & & & & \\ & \bullet \text{-ctn}(8^\circ) & & \bullet \text{-tan}(75^\circ) & \bullet \text{-csc}(10^\circ) & & \end{array}$$

1.  $\text{sin}(350^\circ)$
2.  $\text{sin}(225^\circ)$
3.  $\text{sec}(-20^\circ)$
4.  $\text{tan}(110^\circ)$
5.  $\text{cot}(150^\circ)$
6.  $\text{csc}(190^\circ)$
7.  $\text{tan}(-75^\circ)$
8.  $\text{sec}(250^\circ)$
9.  $\text{tan}(-5^\circ 10')$
10.  $\text{tan}(370^\circ)$
11.  $\text{sin}(400^\circ)$
12.  $\text{csc}(-55^\circ)$
13.  $\text{sin}(-400^\circ)$
14.  $\text{cos}(294^\circ 50')$
15.  $\text{cot}(172^\circ)$
16.  $\text{sin}(-560^\circ)$
17.  $\text{tan}(165^\circ)$
18.  $\text{csc}(300^\circ)$
19.  $\text{sin}(745^\circ)$

Start a new line.

20.  $\text{cos}(100^\circ)$
21.  $\text{cot}(-152^\circ)$
22.  $\text{csc}(-300^\circ)$
23.  $\text{cot}(-130^\circ)$
24.  $\text{sec}(-62^\circ)$
25.  $\text{cos}(-100^\circ)$

Start a new line.

26.  $\text{tan}(-83^\circ)$
27.  $\text{csc}(216^\circ)$
28.  $\text{csc}(160^\circ 36')$
29.  $\text{tan}(-185^\circ)$
30.  $\text{cos}(102^\circ)$
31.  $\text{tan}(97^\circ)$

Start a new line.

32.  $\text{sin}(-320^\circ)$
33.  $\text{cot}(-220^\circ)$
34.  $\text{sin}(315^\circ)$

Circle this answer.

35.  $\text{cos}(-10^\circ)$

