F.TF.A.2: Determining Trigonometric Functions 1

1 Which is the value of $\cos(-240°)$?
1) $-\frac{1}{2}$
2) $\frac{3}{2}$
3) $\frac{1}{2}$
4) $-\frac{3}{2}$

2 What is the value of $\sin(-240°)$?
1) $\frac{1}{2}$
2) $-\frac{1}{2}$
3) $\frac{\sqrt{3}}{2}$
4) $-\frac{\sqrt{3}}{2}$

3 What is the value of $\cos(-120°)$?
1) $\frac{1}{2}$
2) $-\frac{1}{2}$
3) $\frac{\sqrt{3}}{2}$
4) $-\frac{\sqrt{3}}{2}$

4 The value of $(\sin 60°)(\cos 60°)$ is
1) $\frac{3}{4}$
2) $\frac{\sqrt{2}}{4}$
3) $\frac{\sqrt{3}}{3}$
4) $\frac{\sqrt{3}}{4}$

5 Which is equal in value to $\sin 180°$?
1) $\tan 45°$
2) $\cos 90°$
3) $\cos 0°$
4) $\tan 90°$

6 In the interval $0° \le x < 360°$, $\tan x$ is undefined when x equals
1) 0º and 90º
2) 90º and 180º
3) 180º and 270º
4) 90º and 270º

7 The value of $\tan 126°43'$ to the *nearest ten-thousandth* is
1) −1.3407
2) −1.3408
3) −1.3548
4) −1.3549
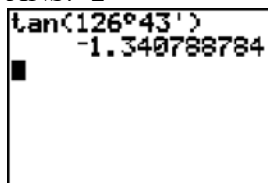
8 The value of csc $138°23'$ rounded to four decimal places is
1) -1.3376
2) -1.3408
3) 1.5012
4) 1.5057

16 Find the value of $\tan 27°26'$ to *four decimal places*.

17 Find the value of $\sin 37°34'$ to *four decimal places*.

9 The value of $\cos 305°$ is
1) 0.5736
2) 0.8192
3) -0.8192
4) -0.5736

18 Find $\tan 27°13'$ to *four decimal places*.

10 Find the value of $\sin 135°$ in radical form.

11 Find the value of $\tan 120°$.

12 Find the value of $\tan(-135°)$.

13 Express the product of $\cos 30°$ and $\sin 45°$ in simplest radical form.

14 Find the value of $\tan 31°27'$ to *four decimal places*.

15 Find the value of $\cos 32°32'$ to *four decimal places*.

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Answer Section
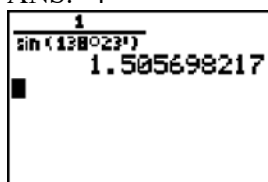
1 ANS: 1   REF: 088527siii
2 ANS: 3   REF: 019027siii
3 ANS: 2   REF: 069434siii
4 ANS: 4   REF: 089017siii
5 ANS: 2   REF: 069021siii
6 ANS: 4   REF: 011312a2
7 ANS: 2

REF: 061115a2
8 ANS: 4

REF: 061217a2
9 ANS: 1   REF: 088621siii
10 ANS:
$$\frac{1}{\sqrt{2}}$$

REF: 089806siii
11 ANS:
$$-\sqrt{3}$$

REF: 018517siii
12 ANS:
1

REF: 068709siii
13 ANS:
$$\frac{\sqrt{3}}{2} \times \frac{\sqrt{2}}{2} = \frac{\sqrt{6}}{4}$$

REF: 061331a2

14 ANS:
0.6116

REF: 018716siii

15 ANS:
0.8431

REF: 068616siii

16 ANS:
0.5191

REF: 068815siii

17 ANS:
0.6097

REF: 068908siii

18 ANS:
0.5143

REF: 088516siii