NAME:_____

1. 060901b, P.I. A2.M.2

The number of degrees equal to $\frac{5}{9}\pi$ radians is

[A] 900 [B] 100 [C] 90 [D] 45

2. 080623b, P.I. A2.M.2

What is the number of degrees in an angle whose radian measure is $\frac{7\pi}{12}$?

3. 080704b, P.I. A2.M.2

What is $235°$, expressed in radian measure?

[A] $\frac{\pi}{235}$ [B] $\frac{47\pi}{36}$

[C] 235π [D] $\frac{36\pi}{47}$

4. 060120b

Through how many radians does the minute hand of a clock turn in 24 minutes?

[A] 0.6π [B] 0.2π

[C] 0.4π [D] 0.8π

5. 010615b

What is the radian measure of the angle formed by the hands of a clock at 2:00 p.m.?

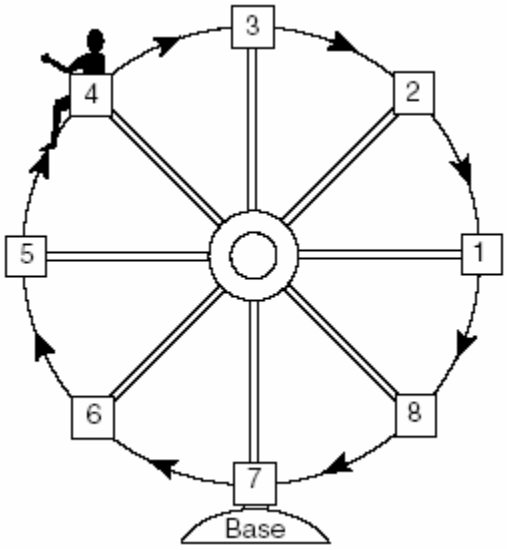
[A] $\frac{\pi}{2}$ [B] $\frac{\pi}{4}$ [C] $\frac{\pi}{6}$ [D] $\frac{\pi}{3}$

6. 080223b

An art student wants to make a string collage by connecting six equally spaced points on the circumference of a circle to its center with string. What would be the radian measure of the angle between two adjacent pieces of string, in simplest form?

7. 010421b

Kristine is riding in car 4 of the Ferris wheel represented in the accompanying diagram. The Ferris wheel is rotating in the direction indicated by the arrows. The eight cars are equally spaced around the circular wheel. Express, in radians, the measure of the *smallest* angle through which she will travel to reach the bottom of the Ferris wheel.



[1] B

[2] 105, and appropriate work is shown, such as $\frac{7\pi}{12}\cdot\frac{180}{\pi}$.
[1] Appropriate work is shown, but one computational error is made.
or [1] Appropriate work is shown, but one conceptual error is made.
or [1] 105, but no work is shown.
[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously incorrect procedure.
[2]

[3] B

[4] D

[5] D

[2] $\frac{\pi}{3}$, and appropriate work or an appropriate diagram is shown.
[1] Appropriate work is shown, but the answer is not expressed in simplest form.
or [1] A correct diagram is drawn, but no answer or an incorrect answer is found.
or [1] 60°, and appropriate work or an appropriate diagram is shown.
or [1] $\frac{\pi}{3}$, but no work is shown.
[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously incorrect procedure.
[6]

[2] $\frac{5\pi}{4}$ or an equivalent answer in radian measure, and appropriate work is shown.
[1] Appropriate work is shown, but one computational error is made.
or [1] Appropriate work is shown, but one conceptual error is made.
or [1] 225 or 225°, but appropriate work is shown.
or [1] The measure of the angle in a counterclockwise rotation is found, resulting in an answer of $\frac{3\pi}{4}$.
or [1] $\frac{5\pi}{4}$ or an equivalent answer in radian measure, but no work is shown.
[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously incorrect procedure.
[7]