| Student: _____ | Instructor: Joe Betters | |
| Date: _____ | Course: Pre-Calculus Pre AP (Master Course) | Assignment: 6.1 Classwork Day 1 |

1. Find the length s and area A.
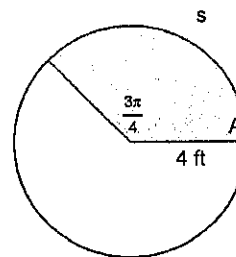
s = _____ feet
(Type an integer or decimal rounded to three decimal places as needed.)
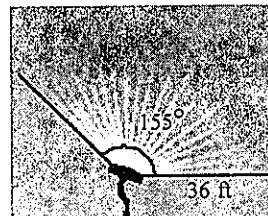
A = _____ square feet
(Type an integer or decimal rounded to three decimal places as needed.)

2. The minute hand of a clock is 9 inches long. How far does the tip of the minute hand move in 35 minutes?

The tip of the minute hand moves _____ inches.
(Type an integer or decimal rounded to three decimal places as needed.)

3. A water sprinkler sprays water over a distance of 36 feet while rotating through an angle of 155°. What area of lawn receives water?

The area A of the sector is _____ square feet.
(Type an integer or decimal rounded to two decimal places as needed.)

1. 9.425

   18.850

_____

2. 32.987

_____

3. 1753.01

_____

6.1 classwork day 1

① $S = r\theta$

$S = 4\left(\frac{3\pi}{4}\right) = \boxed{9.425}$ ft   arc length

A $= \frac{1}{2}r^2\theta$

A $= \frac{1}{2}(4)^2\left(\frac{3\pi}{4}\right) = \boxed{18.850}$ ft²   Area of Sector

② $C = 2\pi r \,(\% \text{ of circle})$

$C = 2\pi (9)\left(\frac{35}{60}\right) = \boxed{32.987}$ in

③ $A = \frac{1}{2}r^2\theta$

$A = \frac{1}{2}(36)^2\left(\frac{155\pi}{180}\right)$

$\dfrac{Degree}{180} = \dfrac{Radian}{\pi}$

$A = \boxed{1753.01}$ ft²