$\qquad$
Trigonometry and Area
Date $\qquad$ Period

Find the area of each figure. Round your answer to the nearest tenth.
1)

3)

2)

4)

6) A triangle with two sides that measure 6 m and 8 m with an included angle of $137^{\circ}$.
8) A triangle with two sides that measure 8 ft and 7 ft with an included angle of $30^{\circ}$.

Find the area of each regular polygon. Round your answer to the nearest tenth.


Perimeter $=108 \mathrm{mi}$
11)


Perimeter $=144 \mathrm{~cm}$
13) A regular hexagon with a perimeter of 48 yd .
10)

12)

14) A regular pentagon 6 ft on each side.
$\qquad$
Trigonometry and Area
Date $\qquad$ Period

Find the area of each figure. Round your answer to the nearest tenth.
1)

$24 \mathrm{~cm}^{2}$
3)

$11.9 \mathrm{yd}^{2}$
2)

$9.6 \mathrm{in}^{2}$
4)

$13.9 \mathrm{in}^{2}$
6) A triangle with two sides that measure 6 m and 8 m with an included angle of $137^{\circ}$.
$16.4 \mathrm{~m}^{2}$
7) A triangle with two sides that measure 5 cm and 8 cm with an included angle of $39^{\circ}$.
$12.6 \mathrm{~cm}^{2}$
8) A triangle with two sides that measure 8 ft and 7 ft with an included angle of $30^{\circ}$.
$14 \mathrm{ft}^{2}$

Find the area of each regular polygon. Round your answer to the nearest tenth.
9)


Perimeter $=108 \mathrm{mi}$
890.2 mi $^{2}$
11)


Perimeter $=144 \mathrm{~cm}$
$1612.2 \mathrm{~cm}^{2}$
10)

$43.3 \mathrm{~km}^{2}$
12)

$210.4 \mathrm{~cm}^{2}$
14) A regular pentagon 6 ft on each side.
$61.9 \mathrm{ft}^{2}$

