$\qquad$
Period: $\qquad$

1. Find the approximate area.

2. Find the area of the shaded region

3. Find the area of an equilateral triangle with sides of 23 inches. Round to the nearest tenth.
4. A rectangular pool has a 6 ft walkway around it. How many more feet is the outer perimeter of the walkway than the perimeter of the pool?
5. Find the diameter of a circle with circumference 213 cm Round to the nearest tenth.
6. Find the area and perimeter in terms of $x$.
7. Find the distance between $(-3,-2)$ and $(1,5)$. Round to the nearest tenth.

8. A fence is to be built around an entire rectangular field which measures 210 ft by 173 ft . If fencing costs $\$ 4.29$ per foot, what will the cost be of the fence?

9: What does the notation QT represent?
10. Graph the lines listed below on the grid; find the area of the enclosed figure.

$$
\begin{aligned}
& x=-2 \\
& y=-1 \\
& x+y=1
\end{aligned}
$$

11. Do these side lengths form a triangle, yes or no?
a) $5,3,3$
b) $7,7,16$
c) $4,6,2$
12. If you had 148 feet of chain link fencing, what dimensions would you make the garden in order to have the largest rectangular area possible?
13. If a segment has an endpoint of $(-2,9)$ and a midpoint $(3,-2)$, find the other endpoint.
14. Find the base of a triangle with height 16 in and an area of 200 square inches.
15. If $<\mathrm{A}$ and $<\mathrm{C}$ form a linear pair, then their measures must add to $\qquad$ degrees.
16. It the area of a circle is 406 square meters, what is the radius? Round to the nearest tenth.

17. Draw a diagram for each vocabulary term:
a) vertical angles ABC and XBY
b) perpendicular lines

In 18-19, Solve for x . Round answer(s) to nearest tenth if necessary.
18. $5 x^{2}-x-3=0$
19. $8+9(x-4)=4 x+3(x-6)$
c) complementary angles
d) supplementary angles

