Name: $\qquad$ 2016 Period: $\qquad$
1-3: Solve for $x$. Round to the nearest tenth, if necessary.

1. $3+2(x-2)=7$
2. $2 x^{2}-10 x+7=0$
3. $\frac{x-6}{4}=12$

4-6:Given each set of three lengths: a) indicate whether they will form a triangle (yes or no) b) if yes, classify by sides (scalene, isosceles, or equilateral).
4. $3,7,2$
5. $2,5,3$
6. $4,6,3$

7: Find the area. Round to the nearest tenth.


8: Find the area and perimeter.
Round to the nearest tenth.

9: What does the notation RS represent?
11. Find the area of a triangle with sides $5 \mathrm{~cm}, 7 \mathrm{~cm}$ and 10 cm . Round to the nearest tenth.
10. Find the distance between $(2,5)$ and $(-4,2)$. Round to the nearest tenth.

12. Find the area of an equilateral triangle with sides 38 inches.
13. If you had 208 feet of chain link fencing, what dimensions would you make the garden in order to have the largest rectangular area possible?
14. Find the midpoint of $\overline{X Y}$ if $X(-4,7)$ and $Y(12,-3)$.

15-16: Find the missing side to the nearest tenth.

18. If the circumference of a circle is 400 cm , what is the diameter? (Use calculator $\pi$ and round to the nearest tenth.)

19-21: Make a sketch of the following.
19. Plane $R$ containing 3 noncollinear points A,C, and J
20. Line segment CD intersecting ray PQ at point $W$.
21. Coplanar points $Q, R, T$, and $H$ where only $Q, R$, and $T$ are collinear.

