1. Find the area of a triangle with sides 10 in ., 15 in ., and 23 in. Round answer to nearest tenth.
2. Find the midpoint of $A(3,4)$ and $B(-5,-2)$.
3. $\angle 1$ and $\angle 2$ are a linear pair.
$m \angle 1=64^{\circ}$. Find $m \angle 2$.
Use the figure below to answer the following:
4. What is the name of the plane?
5. $\overleftrightarrow{S X} \cap R=$
6. $\overline{T U} \cap \overline{U V}=$
7. $\overline{T S} \cap \overline{U V}=$


Use inductive reasoning to fill in the pattern.

1. $3,8,11,19$,_,_
2. a, c, f, j,_, $\qquad$
Use deductive reasoning to answer the questions.
3. If you are tardy $\mathbf{3}$ times, you get a detention. Sue was tardy for the third time today, therefore,

From the following set of numbers $\{4,9,16,25\}$ state which of the following are true or false if you are randomly selecting two numbers from the set.
4. The square root of at least one will be a decimal.

5 . The sum of the numbers will be odd.
6. Four will be a factor of the numbers.

Identify the type of reasoning as inductive or deductive.
7. John noticed that Tara wore a dress on Tuesdays for the entire month of November. On Monday John said, "I bet Tara wears a dress tomorrow."

8 Lana is shorter than Sheila. Lana notices that Sheila is shorter than Maria, and concludes that she is shorter than Maria.
9. Solve the inequality: $-7 x+7<-56$

