$\qquad$
Hour $\qquad$

## Directions: Use the figure to answer questions 1-3.

Students must review vocabulary as vocabulary will be assessed on the test. ©

1) Name all angles that have B as a vertex.

2) Name a pair of supplementary angles.
3) Name a pair of vertical angles.
4) Simplify the radical: $\sqrt{192}$
5) Find the value of the variable and $S T$ if $S$ is between $R$ and $T$. Let $\mathrm{RS}=16, \mathrm{ST}=2 \mathrm{x}$, RT $=5 \mathrm{x}+10$. You must show all of your work, justify, and show geometry.
6) Find the value of x and $S R$ if $R$ is between $S$ and $T . S R=3 \mathrm{x}$, $R T=2 \mathrm{x}+1, S T=6 \mathrm{x}-1$. You must show all of your work, justify, and show geometry.
7) Using the picture to the right, find the length of $\overline{X Y}$. You must show all of your work, justify, and show geometry.

8) Find the value of x and $\overline{S T}$ using the figure to the right if T is the midpoint of SU . You must show all of your work, justify, and show geometry.

9) Find the value(s) of x and $\overline{S T}$ using the figure to the right if T is the midpoint of $\mathrm{SU}, S T=(x-4)^{2}$, and $\mathrm{TU}=9 \mathrm{~cm}$. You must show all of your work, justify, check your answers, and show geometry.

10) Find the value(s) of $x$ and $B C$. You must show all of your work, justify, check your answers, and show geometry.


Directions: Find the distance, midpoint, and slope of each segment. You must simplify radicals and fractions!
11) J(4, 2), K(8, -6)


Distance: $\qquad$
Midpoint: $\qquad$
Slope: $\qquad$
12) Find the coordinate of the endpoint $S$ if $T$ is the midpoint of $R S$ and $T(3,4)$ and $R(-2,3)$. STUDY THIS!!
13) Classify all that apply: adjacent, vertical, linear pairs, complementary, supplementary, right angle and/or congruent.

e)

f)

14) Draw $\overline{F E} \perp \overline{D C}$
15) $\operatorname{Draw} \overline{W X} \cong \overline{Y Z}$
16) Draw $<Q R S$ and $<Q R T$ are a linear pair
17) Draw $\overleftrightarrow{A B}$ is a $\perp$ bisector of $\overrightarrow{S T}$

