Warmup $1 /$ (\# of lives a cat has)
*******EACH PERSON SHOULD HAVE A WHITEBOARD, MARKER, ERASER!********

1. Is the correlation positive or negative?


2. Write the equation of the line in slope intercept form.
3. Determine whether the relation is a function.

$$
\{(-5,2),(1,1),(-5,1),(2,6)\}
$$

4. Solve the equation for $y$ :

$$
y-4=\frac{1}{2}(x-8)
$$

## BAND STUDENTS:

- I have an activity and the homework from tomorrow printed out.
- The notes from tomorrow will be posted on my website.


## Check Homework

## Measuring Angles

- The measure of an angle is usually given in degrees. Since there are $360^{\circ}$ in a circle, one degree is $1 / 360$ of a circle.
- We can use protractors to measure angles.



## Let's play with protractors!

Construct a 50 degree angle. Construct a 35 degree angle that faces up like a v. Construct a 120 degree angle.

## Do p. 792 \#7 \& 8

7) $40^{\circ}$
8) $105^{\circ}$

Postulate
a statement that is (see back) accepted without proof

- What is $A C$ ?

- What is $D F$ ?

- If three points are collinear, then the lengths of the two shorter segments equals the length of the larger segment.


# Segment Addition Postulate 

Let $A, B$, and $C$ be collinear points. If $B$ is between $A$ and $C$, then $A B+B C=A C$

Notice: this means the length of segment $\overline{A B}$ plus the length of segment $\overline{B C}$ equals the length of segment $\overline{A C}$


## Angle Addition Postulate

- If S is in the interior of $\angle P Q R$, then $\mathrm{m} \angle P Q R=\mathrm{m} \angle P Q S+\mathrm{m} \angle S Q R$.



## $G$ is between $F$ and $H, F G=6$, and $F H=11$.

 Find $\boldsymbol{G H}$.$$
\begin{aligned}
& F H=F G+G H \\
& 11=6+G H \\
& \frac{-6}{5}=\frac{-6}{G H}
\end{aligned}
$$


$E$ is between $D$ and $F$. Find $D F$.

$S$ is the midpoint of $R T$. Find $R S, S T$, and $R T$.


$$
R S=4 \quad S T=4 \quad R T=8
$$

## $\mathrm{m} \angle X W Z=121^{\circ}$ and $m \angle X W Y=59^{\circ}$. Find $\mathbf{m} \angle Y W Z$.


$\mathrm{m} \angle Y W Z=\mathrm{m} \angle X W Z-\mathrm{m} \angle X W Y \angle$ Add. Post.
$\mathrm{m} \angle Y W Z=121^{\circ}-59^{\circ}$
Substitute the given values.
$\mathrm{m} \angle Y W Z=62^{\circ}$
Subtract.

## $\overrightarrow{K M}$ bisects $\angle J K L$. Find $\mathbf{m} \angle J K M$.



$\mathrm{m} \angle J K M=30^{\circ}$

$\mathrm{m} \angle W Y Z=(2 x-5)^{\circ}$ and $\mathrm{m} \angle X Y W=(3 x+10)^{\circ}$. Find the value of $x$.


## $\overline{B D}$ bisects $\angle A B C, \mathrm{~m} \angle A B D=\left(\frac{1}{2} y+10\right)^{\circ}$ and

 $\mathrm{m} \angle D B C=(y+4)^{\circ}$. Find $\mathrm{m} \angle A B C . \quad 32^{\circ}$
## Homework

- Worksheet

