## Warm Up Problems

1) Give a reason that the triangles are congruent.

b.

2) a. Find the slope of the line $2 x-3 y=9$.
b. Find the equation of the line perpendicular to $2 x-3 y=9$ that passes through the point $(4,-2)$.
3) If $\triangle A B R \cong \triangle L G W$, complete the following congruence statements:
a. $\overline{A B} \cong$ $\qquad$ b. $\angle G \cong$ $\qquad$
4) Find $x$ and $y$.

5) Complete the proof:

Given: $\overline{B D}$ bisects $\angle A B C, \overline{B A} \cong \overline{B C}$ Prove: $\overline{D A} \cong \overline{D C}$


Warm Up Problems

1) Give a reason that the triangles are congruent.
a.

b.
 SA
2) a. Find the slope of the line $2 x-3 y=9$.
b. Find the equation of the line perpendicular to $2 x-3 y=9$ that passes th
$x-3 y=9$
$-2 x$

$$
\begin{aligned}
2 x-3 y & =9 \\
-2 x & -2 x \\
\frac{-k y}{3} & =\frac{-2 x}{3}+\frac{9}{-3} \\
y & =\frac{2}{3} x-3
\end{aligned}
$$

Warm Up Problems
3) If $\triangle A B R \cong \triangle L G W$, complete the following congruence statements:

$$
\text { a. } \overline{A B} \cong \overline{L G}
$$

b. $\angle G \cong$ $\qquad$ $\angle B$
4) Find $x$ and $y$.

$$
\begin{aligned}
& \substack{(44-5)^{\circ} \\
(3 y+1)<} \\
& (3 x+11)^{\circ} \leftarrow 59
\end{aligned}
$$

Corresp.

$$
\begin{aligned}
& 4 x-5=3 x+11 \quad 3(16)+11=59 \\
& -3 x \quad-3 x
\end{aligned}
$$

Same Side Int.

$$
\begin{aligned}
& x-5 y=11 \\
& x+5
\end{aligned}
$$

$$
\begin{aligned}
3 y+1+59 & =180 \\
3 y+60 & =180 \\
60 & =60 \\
\frac{3}{3} & =120 \\
y & =40
\end{aligned}
$$

$$
x=16
$$

Warm Up Problems
5) Complete the proof: Given: $\overline{B D}$ bisects $\angle A B C, \overline{B A} \cong \overline{B C}$

Prove: $\overline{D A} \cong \overline{D C}$

$$
\begin{array}{l|l}
\text { Statements } & \text { Reasons } \\
\hline 1 \overline{\bar{B} D \text { bis. } \angle A B C, \overline{B A}}=\overline{B C} & 1) \text { Given }
\end{array}
$$

2) $\angle A B D \cong \angle C B D$
3) $\overline{B D} \cong \overline{B D}$
4) $\triangle A B D \cong \triangle C B D$
5) $\overline{D A} \cong \overline{D C}$

6) Def bis.
7) $\operatorname{Reflex}$.
8) $S A S$
9) CPCTC

## Things to Do Today

$\left.\begin{array}{l}\text { - Unit } 2 \text { Activity } \\ \text { - Review Sheet }\end{array}\right\}$ on rosenmath.com

- Do/Redo homework from 11/1 and 11/3
- Exact Path ( 80 hours due by $11 / 17$ )

$$
\text { Unit } 2 \text { Test on Tuesday }
$$

