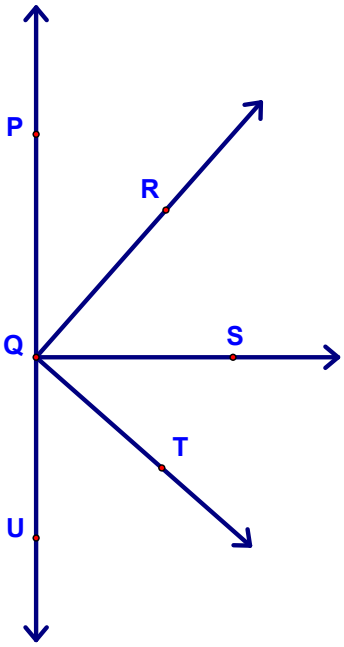
Drawing Conclusions - Lesson 2-3

Here's today's warmup…it's a doosie!



$\overleftrightarrow{PQ} \perp \overrightarrow{QS}$

$\overrightarrow{QR} \perp \overrightarrow{QT}$

If two of the non-straight angles are selected at random, find the probability that the angles are:

1. **Supplementary**
2. **Complementary**
3. **Congruent**

OK…I want to make sure that you remember the following "shortcuts" that I'm going to allow you to use from here on out:

After doing recent homework (2.2), I'm going to let you use the following in order to save a few steps!

If two ∠s form a right ∠, then they are complementary.

and

If two ∠s form a straight ∠, then they are supplementary.

Now I want to discuss the procedure for drawing conclusions:

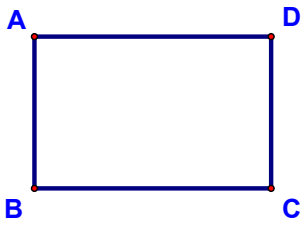
Procedure for Drawing Conclusions

1. **Memorize theorems, definitions, and postulates.**
2. **Look for key words and symbols in the given information.**
3. **Think of all the theorems, definitions, and postulates that involve those keys.**
4. **Decide which theorem, definition, or postulate allows you to draw a conclusion.**
5. **Draw a conclusion and give a reason to justify the conclusion. *Be certain that you have not used the reverse of the correct reason.***

We can use this information to do the following examples of drawing conclusions. You should be able to see how the conclusions were drawn from the information given. In some cases you can only draw one conclusion, but in others the given information can really lead you to quite a few conclusions. Just make sure to take them one step at a time!

Given: **∠A is a right ∠**
∠B is a right ∠

Conclusion: **???**



Statements	

Given: E is the midpoint of $\overline{SG}$

Conclusion: ???

Statements	Reasons

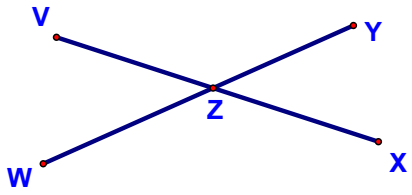
Given: ∠PRS is a right ∠

Conclusion: ???

Statements	Reasons

Given: **Diagram as shown**

Conclusion: **???**



Statements	Reasons