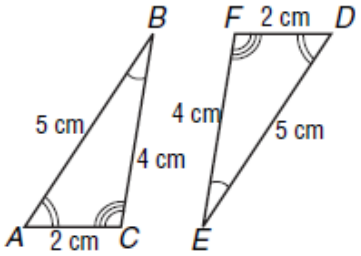
Name _____ Date_____

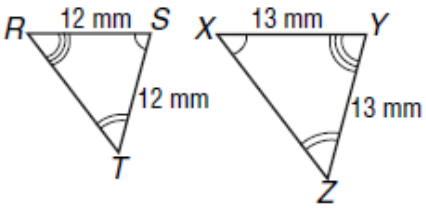
6-4 Skills Practice: *Congruent Polygons* Math8

1. Determine whether the polygons shown are congruent. If so, name the corresponding parts and write a congruence statement.

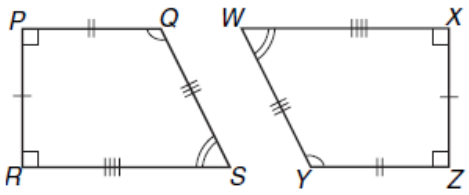
a.



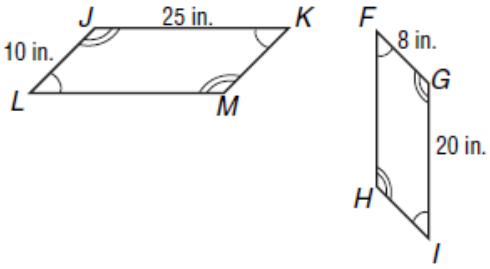
b.



c.



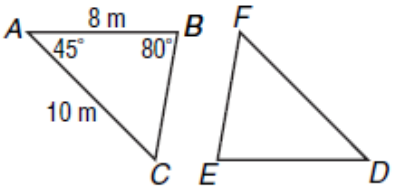
d.



2. In the figure, $\Delta ABC \cong \Delta DEF$. Find each measure.

a. *DF*

b. *DE*



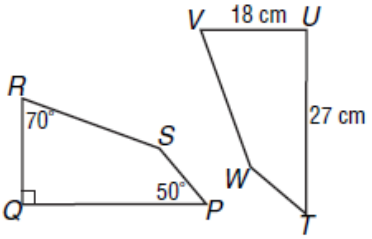
c. $m\angle D$

d. $m\angle E$

3. Determine the angle measures in each polygon.

a. *PQ*

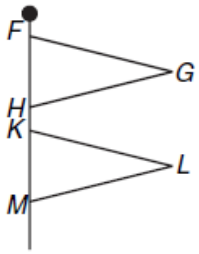
b. *QR*



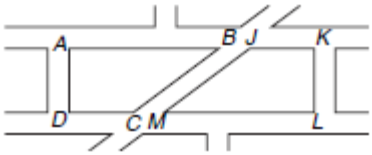
c. $m\angle U$

d. $m\angle V$

4. FLAGS: The two flags flying on the pole are in the shape of triangles. If $\Delta FGH \cong \Delta KLM$, $m\angle F = 80°$, and $m\angle H = 80°$, find $m\angle L$.



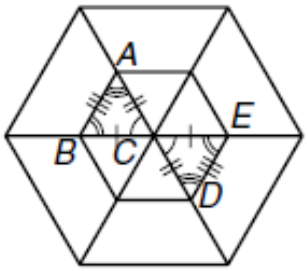
5. FLOORING: Tevin designed custom tiles for his shower as shown. The tiles are congruent quadrilaterals.



Write a congruence statement.

Then find $m\angle J$ if $m\angle A = 90°$, $m\angle B = 60°$, and $m\angle D = 90°$.

6. Part of a spider's web is shown in the figure.

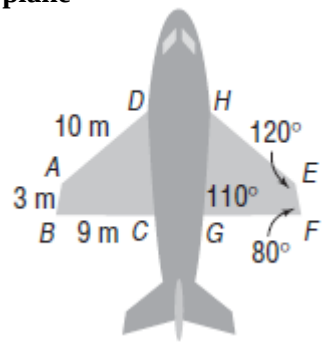


Determine whether the two marked triangles are congruent.

7.

If so, name the corresponding parts and write a congruence statement.

8. The diagram at the right is of an airplane as seen from above. The wings of the airplane form congruent quadrilaterals, so quadrilateral *ABCD* ≅ quadrilateral *EFGH*.



Name an unlabeled wing part whose length is 3 meters. Explain your answer.

Explain how a quality control person could find out if $m\angle DCB$ was correct.