## Geometry

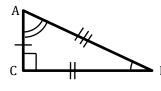
## 5.2 Apply Congruence and Triangles

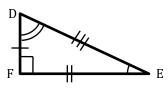
Congruent (≅)

Exactly the same









 $\Delta ABC \cong \Delta DEF$ 

 $\triangle ABC \cong \triangle EDF$ 

$$\frac{\angle B \cong \angle E}{BC \cong \overline{EF}}$$

$$\angle C \cong \angle F$$

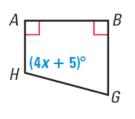
$$\overline{AB} \cong \overline{DE}$$

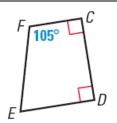
$$\overline{AC} \cong \overline{DF}$$

In the diagram, ABGH  $\cong$  CDEF

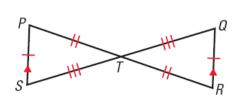
Identify all the pairs of congruent corresponding parts

Find the value of x and find  $m \angle H$ .



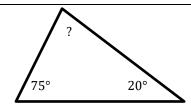


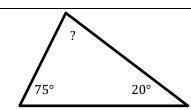
Show that  $\Delta PTS \cong \Delta RTQ$ 



**Third Angle Theorem** 

\_\_\_ of one triangle are \_\_\_\_\_ to \_\_\_\_ of another triangle, then the \_\_\_\_\_ are

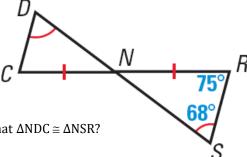




Geometry 5.2 Name:
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Congruence of triangles is \_\_\_\_\_\_, and \_\_\_\_\_\_,

In the diagram, what is m∠DCN?



By the definition of congruence, what additional information is needed to know that  $\Delta NDC \cong \Delta NSR$ ?

Assignment: 235 #2, 3, 4, 6, 8, 10, 12, 13, 14, 15, 17, 18, 20, 21, 24, 26, 28, 30, 31, 32 = 20 total