DIN:

Dilate $\triangle$ RHL by a scale factor of 2 centered at $H(6,-6)$


What do you notice?

Dilations create $\qquad$
$\qquad$ $=$ $\qquad$

So, for dilations $\qquad$ STAY THE SAME

Two triangles that are DILATED are $\qquad$

| WAYS TO PROVE TRIANGLES ARE ___ |
| :--- |

## Labeling Practice

1) Label that $\angle \mathrm{BAC} \cong \angle \mathrm{EDF}$ and $\angle \mathrm{ABC} \cong \angle \mathrm{DFE}$, and $\angle \mathrm{C} \cong \angle \mathrm{E}$


Directions: Give the set of triangles below, determine which two triangles are similar to each other.

1) $\angle \mathrm{A} \cong \angle \mathrm{D}$ and $\angle \mathrm{ABC} \cong \angle \mathrm{DEF}$

2) $\angle R \cong \angle X$

3) $\overline{F R} \| \overline{E T}$

4) $\overline{C A} \| \overline{D B}$


Practice!!!! - Label the pictures and write the similarity statements between the triangles.

1) $\angle \mathrm{ABC} \cong \angle \mathrm{DEF}$ and $\angle \mathrm{A} \cong \angle \mathrm{D}$
2) $\angle \mathrm{R} \cong \angle \mathrm{Q}$ and $\angle \mathrm{QZT} \cong \angle \mathrm{RAB}$

3) $\angle \mathrm{T} \cong \angle \mathrm{W}$ and $\angle \mathrm{TAX} \cong \angle \mathrm{WRS}$

4) $\angle \mathrm{CAB} \cong \angle \mathrm{CED}$

5) $\angle R \cong \angle U$

6) $\angle O J K \cong \angle K S E$

7) $\overline{W T} \| \overline{E S}$

8) $\angle \mathrm{QDE} \cong \angle \mathrm{A}$

9) $\overline{C O} \| \overline{A S}$

10) $\overline{Q R} \| \overline{T U}$

11) $\angle \mathrm{GFH} \cong \angle \mathrm{I}$

12) $\angle \mathrm{N} \cong \angle M K L$

13) $\overline{S V} \| \overline{T X}$

14) $\quad \overline{A X} \| \overline{T S}$

15) $\quad \overline{E Q} \| \overline{W R}$


## Challenge:

1) $\overline{H C} \| \overline{G D}$

2) $\angle \mathrm{TVX} \cong \angle \mathrm{RWX}$


## Exit Ticket

Directions - write a similarity statement for each of the pairs of triangles below.

1) $\angle \mathrm{HGF} \cong \angle \mathrm{I}$

2) $\angle \mathrm{BAR} \cong \angle \mathrm{TZQ}$ and $\angle \mathrm{B} \cong \angle \mathrm{T}$

