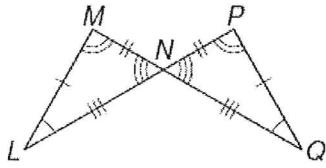**Congruent Triangles In-Class Practice**
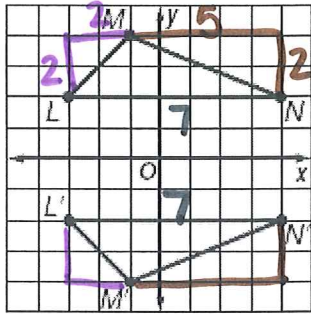
1) Identify the congruent triangles in the given figure

$\triangle MNL \cong \triangle PNQ$

2) Verify that the following transformation preserves congruence.

$\triangle LMN \cong \triangle L'M'N'$

$LM^2 = 2^2 + 2^2$
$LM^2 = 4 + 4$
$LM = \sqrt{18}$
$LM = 2\sqrt{2}$

$MN^2 = 5^2 + 2^2$
$MN^2 = 25 + 4$
$MN = \sqrt{29}$
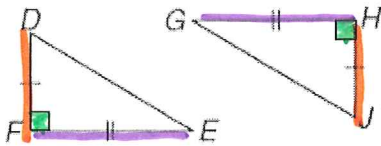$LN = 7$

$L'M' = 2^2 + 2^2$
$L'M' = 2\sqrt{2}$

$M'N' = 5^2 + 2^2$
$M'N' = \sqrt{29}$

$L'N' = 7$

SSS

Use the given information to identify the congruent triangles. Describe what congruence shortcut you used and what angles or sides you know are congruent.

3.

a. Short cut congruence used __SAS__

b. Name the 3 congruent corresponding parts:
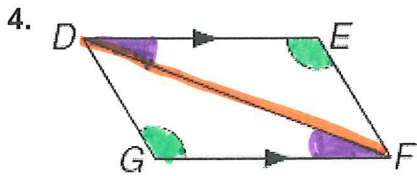
S: $GH \cong FE$ given

A: $\angle F \cong \angle H$ given

S: $DF \cong HJ$ given

4.

a. Short cut congruence used __AAS__

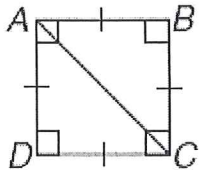b. Name the 3 congruent corresponding parts:

A: ∠E ≅ ∠G   given

A: ∠D ≅ ∠F   alt. int. ∠s are ≅
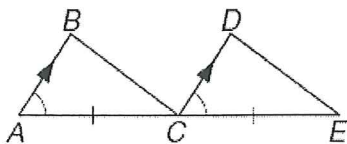
S: DF ≅ DF   reflexive

5.

a. Short cut congruence used _____

b. Name the 3 congruent corresponding parts:

LOTS of them ☺

6.

a. Short cut congruence used _____

b. Name the 3 congruent corresponding parts

No shortcut!