

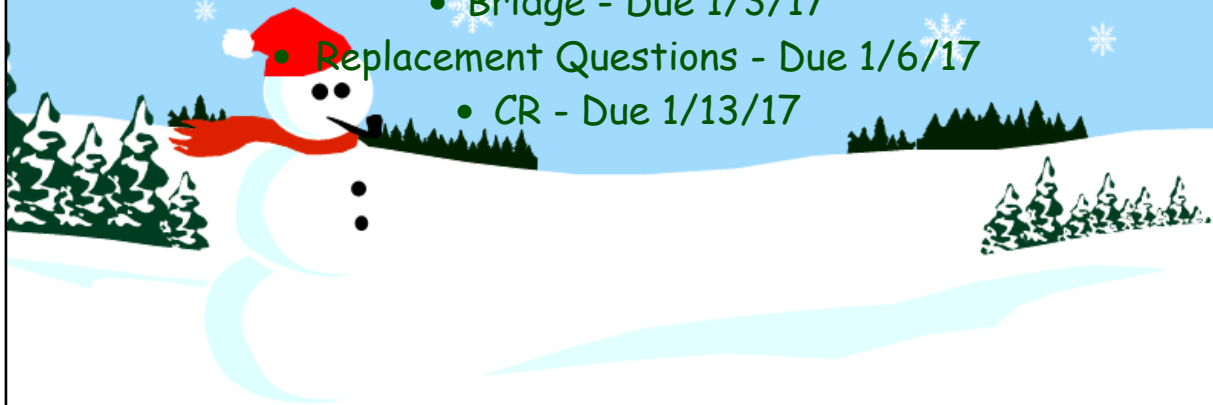
Unit 5 Day 11: - Test/Make up Day

AGENDA:

- Test Correction/ Replacement Question
- Take Out Unit 4 - Test (Check Folders)

Homework - Due After Break

- Bridge - Due 1/3/17
- Replacement Questions - Due 1/6/17
- CR - Due 1/13/17



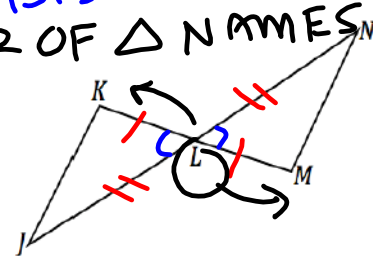
Start with #9

→ S

SEG BIS → 2 ≅ SEGS
CORR OF Δ NAMES

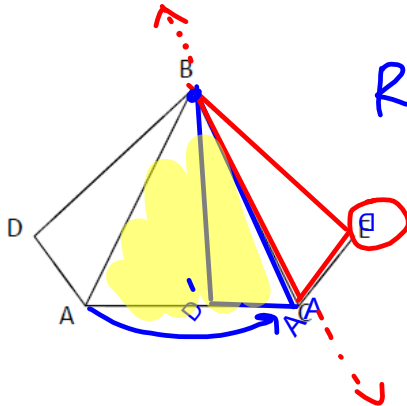
9. Given \overline{KM} and \overline{JN} bisect each other in the drawing at right,

- State the triangle congruence: $\triangle LMN \cong \triangle LKJ$
- State the criteria for the congruence: SAS
- Identify the rigid motion that maps $\triangle LMN$ onto the congruent triangle. State where each vertex maps to after each transformation. Be specific – include any angle measure/center of rotation; point/segment/line of reflection; vector of translation.



ROTATION AROUND L
180°
L → L, M → K
N → J

10. Given: $\triangle BDA \cong \triangle BEC$. Identify the rigid motion(s) that maps $\triangle BDA$ onto $\triangle BEC$. State where each vertex maps to after each transformation. Be specific – include any angle measure/center of rotation, point/segment/line of reflection; vector of translation.



ROTATE AROUND
B, $m\angle ABC$

$A \rightarrow C, B \rightarrow B, D \rightarrow D'$

REFLECT INTO BC
 $B \rightarrow B, C \rightarrow C, D' \rightarrow E$

11. Given: $\overline{AD} \cong \overline{CB}$ & $\overline{AB} \cong \overline{CD}$

Prove: 1) $\triangle ADB \cong \triangle CBD$

2) $\overline{AD} \parallel \overline{BC}$

Plan: 1) DECORATE DIAGRAM

2) $\triangle \rightarrow$ 3) CPCTC \rightarrow 4) \parallel property



① $\triangle \cong \triangle$

BY SSS

② PART \cong PART

BY CPCTC

S S S

$\triangle ADB \cong \triangle CBD$ BY SSS \cong

② $\angle ADB \cong \angle CBD$ BY CPCTC

③ \cong ALT INT \angle 'S \rightarrow \parallel LINES

13. Given: $\triangle ABC$ with vertices
 $A(-4, -1)$, $B(-2, 7)$, $C(1, 2)$

Prove: $\triangle ABC$ is an isosceles right triangle
 (Show all algebraic calculations and be sure to include
 concluding geometric statements)

A) Prove $\triangle ABC$ is a right triangle

Plan perpendicular \rightarrow rt \angle \rightarrow rt \triangle

SLOPES Prove perpendicular !!!

$$+\frac{3}{5} \perp -\frac{5}{3} \rightarrow \text{RT } \triangle C \rightarrow \text{RT } \triangle ABC$$

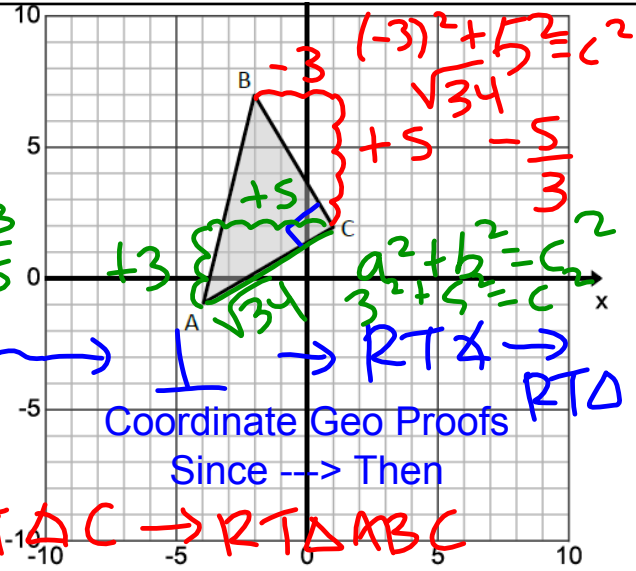
$$\overline{AC} \perp \overline{BC}$$

B) Prove $\triangle ABC$ is an isosceles triangle

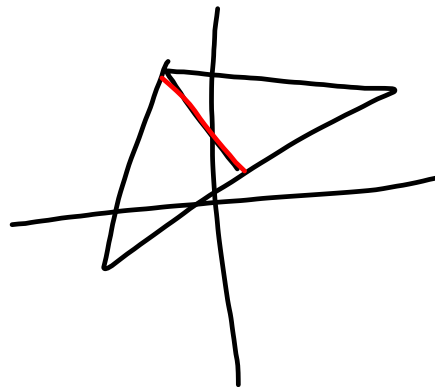
Plan: 2 sides \rightarrow Isosceles \triangle

$$\sqrt{34} = \sqrt{34} \rightarrow 2 = \text{SIDES}$$

$$(\cong) \rightarrow \text{ISOS } \triangle ABC$$



Coordinate Geo Proofs
 Since \rightarrow Then



Attachments



Unit 4 Test 2016.pdf