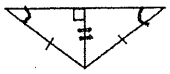
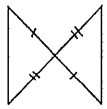
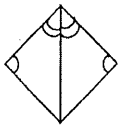
Geometry Name: Key Hr: _____

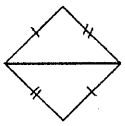
Review for 1st Semester Final Exam (Day 2)

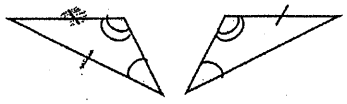
1. Match each set of congruent triangles with the reason they are congruent.

A,B,C,
1) D,E 

2) B 

3) D 

4) A 

5) F 

6) C, D 

A) SSS
B) SAS
C) ASA
D) AAS
E) HL
F) None

2. Match each statement with its property.

1) D $\overline{DQ} \cong \overline{DQ}$

2) B $< A \cong < C$ and $< C \cong < F$
So $< A \cong < F$

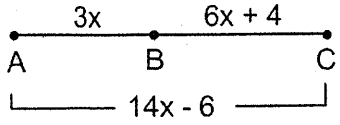
3) F $AB = 7$, so $7 = AB$

4) A $< Q \cong < T$
So $< T \cong < Q$

5) E $x + y = 10$ and $x = 3$
So $3 + y = 10$

A) Symmetric Property of ~~Congruence~~
B) Transitive Property of Congruence
C) Reflexive Property of Equality
D) Reflexive Property of Congruence
E) Substitution Property of Equality
F) Symmetric Property of Equality

3. Solve for x and justify each step.



Statements	Reasons
1) $AB + BC = AC$	1. Segment Add. Post.
2) $AB = 3x$, $BC = 6x + 4$, $AC = 14x - 6$	2. Given
3) $3x + 6x + 4 = 14x - 6$	3. Substitution Prop. =
4) $9x + 4 = 14x - 6$	4. Simplify
5) $-9x \quad -9x$	5. subtraction prop. =
6) $4 = 5x - 6$	6. Simplify
7) $+6 \quad +6$	7. Addition prop =
8) $\frac{10}{5} = \frac{5x}{5}$	8. Simplify
9)	9. Division prop =
10) $2 = x$	10. Simplify