

Name _____ Pd _____ Date _____

Quiz Review 5.1 - 5.3, 5.5, 5.6

Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

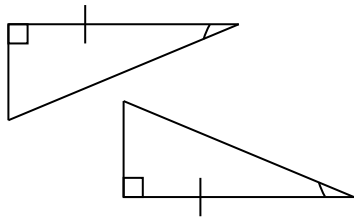
X Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

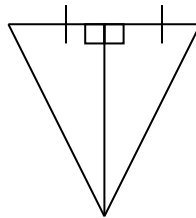
CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Congruent triangles	1 - 6	7 - 12	
SSS	1 - 6	7 - 13	
SAS	1 - 6	7 - 12, 14	
ASA	1 - 6	7 - 12, 15	
AAS	1 - 6	7 - 12	
HL	1 - 6	7 - 12	
Arc Marks & Tic Marks	1 - 6	7 - 12	
Classifying Triangles by sides & angles	16	17, 18	19 - 26
Distance formula	16		
Perpendicular slopes	16		
Perimeter	26		
Interior & Angles	27		28 - 35
Triangle Sum Theorem		27	28 - 35
Exterior Angle Theorem		27	28 - 35
Vertical Angles & Linear Pairs			28 - 35

I. Can the two triangles be proved congruent? If so, give the reason, if not write none. Show all markings.

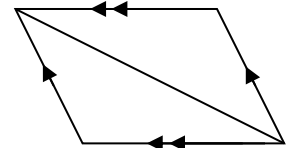
1. _____



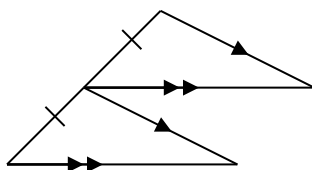
2. _____



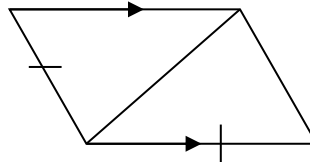
3. _____



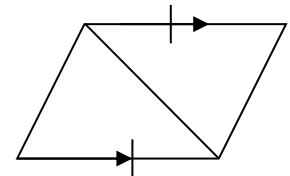
4. _____



5. _____

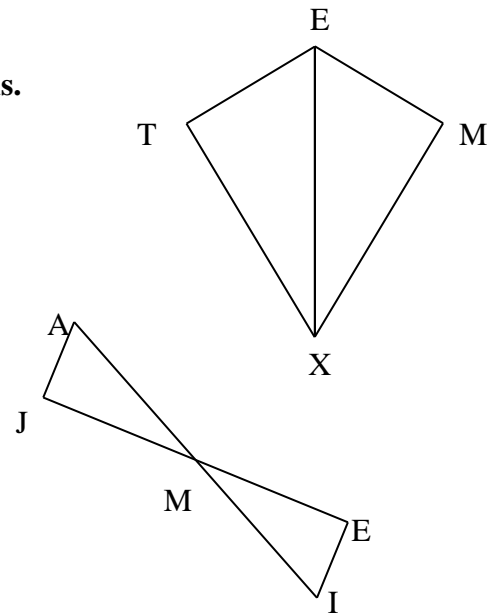


6. _____



7 – 12: Redraw the image or mark and erase to get the visuals.

- _____ 7. \overline{EX} bisects $\angle TEM$, $\overline{TE} \cong \overline{EM}$
- _____ 8. $\overline{TE} \perp \overline{XT}$, $\overline{ME} \perp \overline{XM}$, $\angle TEX \cong \angle MEX$
- _____ 9. $\overline{TX} \cong \overline{XM}$, \overline{EX} bisects $\angle TEM$
- _____ 10. M is the midpoint of \overline{JE} , $\angle A \cong \angle I$
- _____ 11. M is the midpoint of \overline{JE} , $\overline{AJ} \cong \overline{IE}$
- _____ 12. $\overline{JA} \perp \overline{JE}$, $\overline{EI} \perp \overline{JE}$, M is the midpoint of \overline{JE}

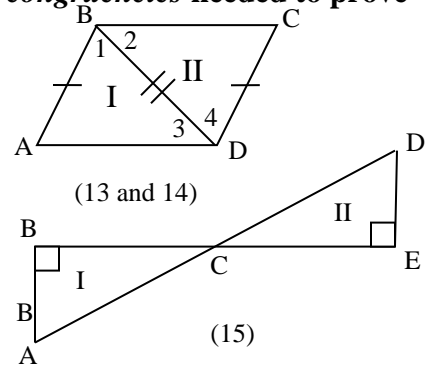


13 – 15: For each of the diagrams below, state the *additional congruencies* needed to prove $\triangle I \cong \triangle II$ by the congruency principle indicated.

13. By SSS.

14. By SAS.

15. By ASA.



16. If $Y(-3,1)$, $X(-1,3)$ and $Z(3,-1)$ are the vertices of a triangle. Classify the triangle according to the side lengths.

17. Consider three non-collinear points D, E and F on a coordinate grid. The x-coordinate of D and E are opposites. The y coordinates of D and E are the same. The x coordinate of F is 0. What kind of triangle must $\triangle DEF$ be? (Scalene, Isosceles, or Equilateral) (HINT: draw your triangle and label it properly.)

18. Consider three non collinear points J, K, and L on a coordinate grid. The y coordinates of J and K are the same. The x coordinates of K and L are the same. Is $\triangle JKL$ acute right or obtuse? (HINT: draw your triangle and label it properly.)

II. Sometimes, Always, Never Questions: Draw diagrams as visuals.

19. _____ An equilateral triangle is a right triangle.
20. _____ An isosceles triangle is equilateral.
21. _____ An isosceles triangle is scalene.
22. _____ If 2 sides and 2 angles of $\triangle GHI$ are congruent, then $\triangle GHI$ is isosceles.
23. _____ A scalene triangle is a right triangle.
24. _____ An equiangular triangle is isosceles, equilateral and acute.

III. Sketch your own diagram and solve.

25. The hypotenuse of an isosceles right $\triangle DEF$ is segment DE. $DF = 6x - 5$ and $EF = 4x + 7$. What is the value of x?
26. If $\triangle VSY$ is isosceles and its perimeter is less than 45, which side is the base? (x is an integer). $SV = 10$, $VY = x + 7$, $SY = 2x - 8$

27. $\triangle ABC$ has an exterior angle at A. The measure of the exterior angle is $(6x - 7)^\circ$. The $m\angle B = (2x)^\circ$ and the $m\angle C = (103 - x)^\circ$. Find x .

IV. Find the missing angles.

28. $m =$ _____

29. $n =$ _____

30. $p =$ _____

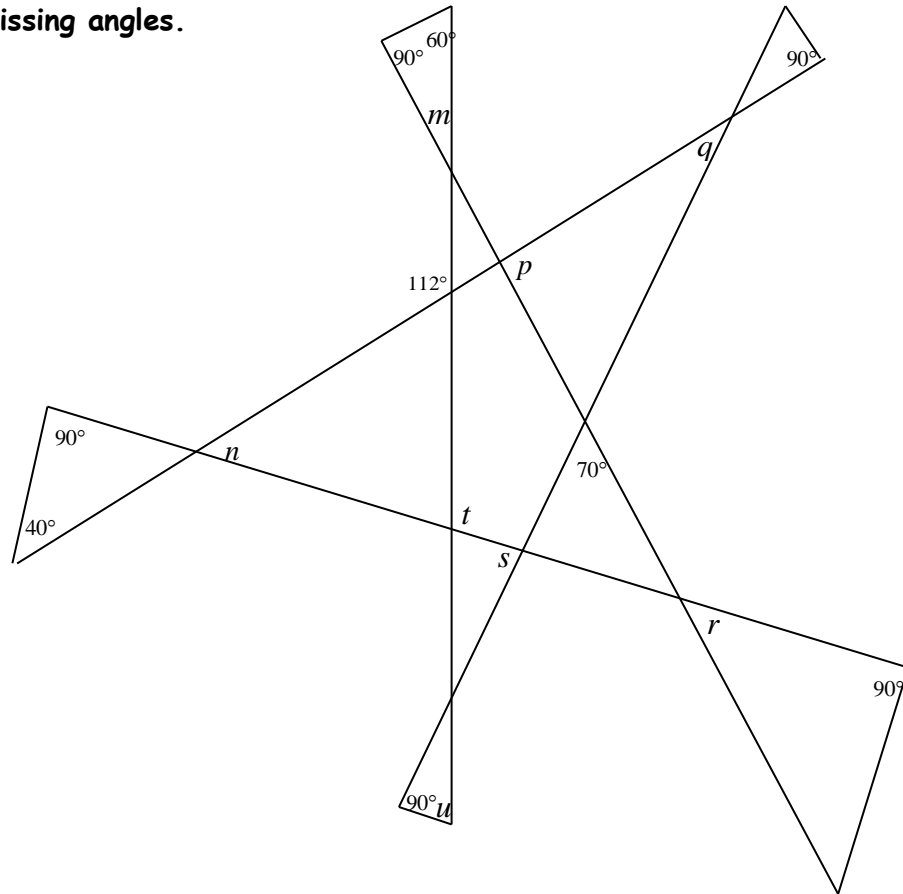
31. $q =$ _____

32. $r =$ _____

33. $s =$ _____

34. $t =$ _____

35. $u =$ _____



CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the

1	2	3	4	5	6	7	8
Basic		Intermediate			Advanced		Solved ALL!

➔