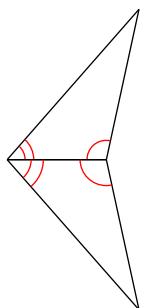


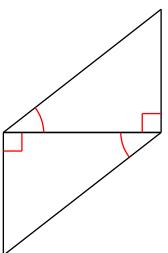
ASA and AAS Congruence

State if the two triangles are congruent. If they are, state how you know.

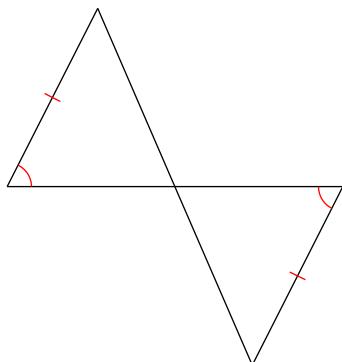
1)



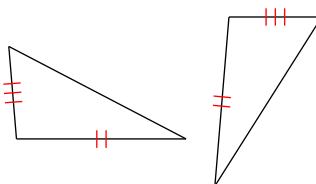
2)



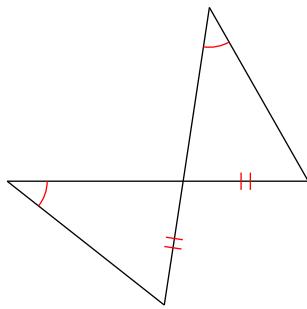
3)



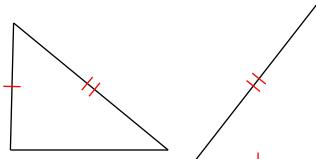
4)



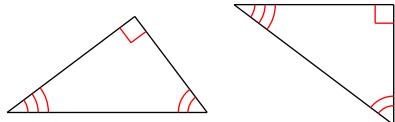
5)



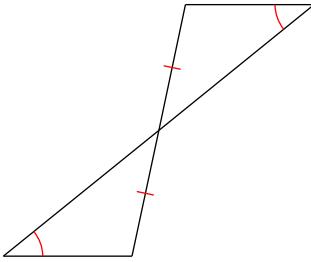
6)



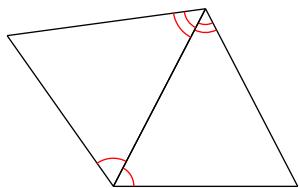
7)



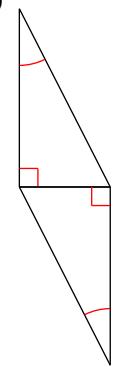
8)



9)

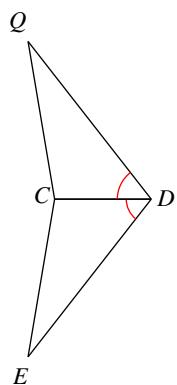


10)

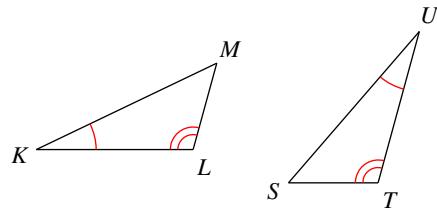


State what additional information is required in order to know that the triangles are congruent for the reason given.

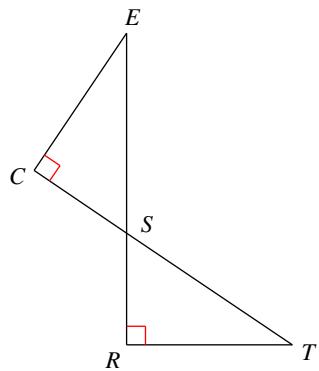
11) ASA



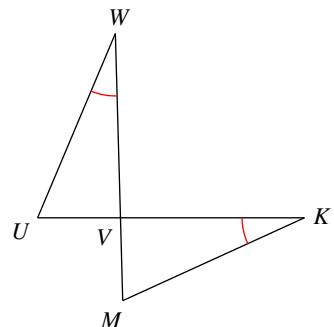
12) ASA



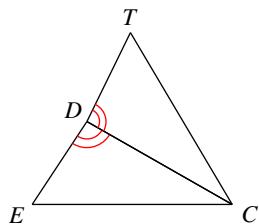
13) ASA



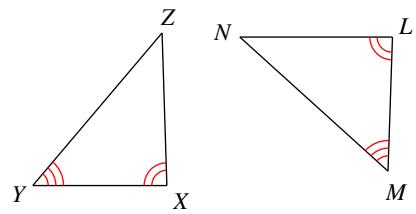
14) ASA



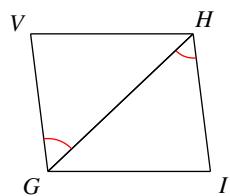
15) AAS



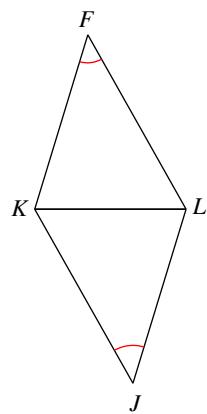
16) AAS



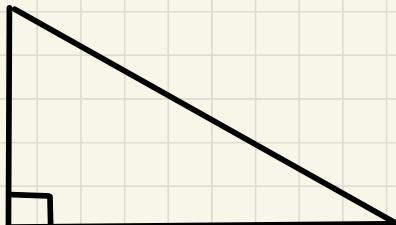
17) ASA



18) AAS



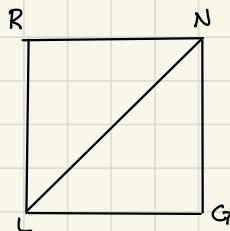
Ch. 26 - Right Triangle Congruence



MAPPING
POSTULATES

POSTULATES TO REGULAR \triangle

REGULAR POSTULATES	RIGHT POSTULATES
SSS	HL  
SAS	LL  
AAS or ASA	HA  
ASA or AAS	LA  



GIVEN: \square RNLG IS A RECTANGLE

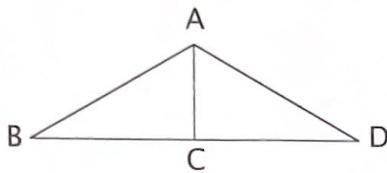
PROVE: $\triangle RNL \cong \triangle GLN$ USING HL

STATEMENTS	REASONS
①	
②	
③	
④	

LESSON PRACTICE

26A

Complete the following proofs using HL, LL, HA, or LA postulates.

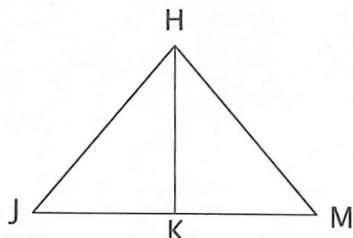


Given: $\triangle ABD$ is isosceles with long side \overline{BD} .

$$\overline{AC} \perp \overline{BD}$$

Prove: C is midpoint of \overline{BD} .

STATEMENTS	REASONS
1. _____	given
$\angle ACB$ is right \angle .	
$\angle ACD$ is a right \angle .	
4. _____	given
5. _____	def. of isosceles triangle
6. _____	reflexive property
7. _____	HL postulate
$\overline{BC} \cong \overline{DC}$	
9. _____	
10. _____	



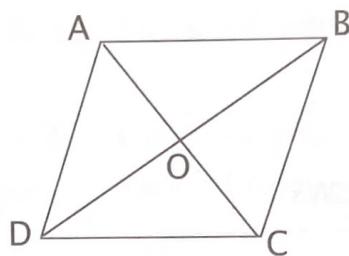
Given: $\triangle HJM$ is equilateral.

$$\overline{HK} \perp \overline{JM}$$

Prove: $\triangle HJK \cong \triangle HMK$

STATEMENTS	REASONS
11. _____	given
$\angle HJK \cong \angle HMK$	
13. _____	given
$\angle HKJ$ is a right \angle	
$\angle HKM$ is a right \angle	
16. _____ \cong _____	reflexive property
17. _____ \cong _____	LA

LESSON PRACTICE 26A



Given: ABCD is a rhombus.

$$\overline{AC} \perp \overline{DB}$$

O is midpoint of \overline{BD} .Prove: $\triangle ABO \cong \triangle CDO$

STATEMENTS	REASONS
18. _____	given
19. _____	definition of a rhombus
20. _____	21. _____
22. \angle _____	definition of perpendicular
23. \angle _____	definition of perpendicular
24. _____	given
25. _____ \cong _____	26. _____
27. _____ \cong _____	28. _____

HONORS LESSON

Find the factors and check by multiplying.

1. $X^2 - 1 =$

2. $X^2 - 36 =$

3. $Y^2 - 16 =$

4. $A^2 - B^2 =$

5. $A^2 - 49 =$

6. $B^2 - 25 =$

7. $Y^2 - X^2 =$

8. $X^2 - 4 =$

9. $A^2 - 144 =$

10. $4X^2 - 4Y^2 =$

11. $B^2 - 64 =$

12. $X^2 - 81 =$

13.
$$\begin{array}{r} 57 \\ \times 53 \\ \hline \end{array}$$

14. $75^2 =$

15.
$$\begin{array}{r} 35 \\ \times 35 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 96 \\ \times 94 \\ \hline \end{array}$$

SYSTEMATIC REVIEW

Find the factors.

1. $x^2 - 16 =$

2. Check #1 by multiplication.

3. $x^2 - 36 =$

4. Check #3 by multiplication.

Find the missing factor.

5. $x - 1 \overline{) 2x^2 + 3x + 5}$

6. Check #5 by multiplication.

Find the square root.

7. $\sqrt{4x^2} =$

8. Check #7 by substituting 10 for X, then multiplying to find the product.

Solve using Oriental Squares.

9. $45^2 =$

10.
$$\begin{array}{r} 37 \\ \times 33 \\ \hline \end{array}$$

11. Find the factors. $X^2 - 18X + 77$. 12. Check #11 by multiplication.

13. $(2^5)^5 =$

14. What is the slope of $2Y - 3X + 6 = 0$?

15. What is the point $(0, 0)$ on a graph called?

16. Distribute and fill in the blanks:

$$(D + 2)(X + 3) = D(X + 3) + 2(X + 3) = \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}.$$

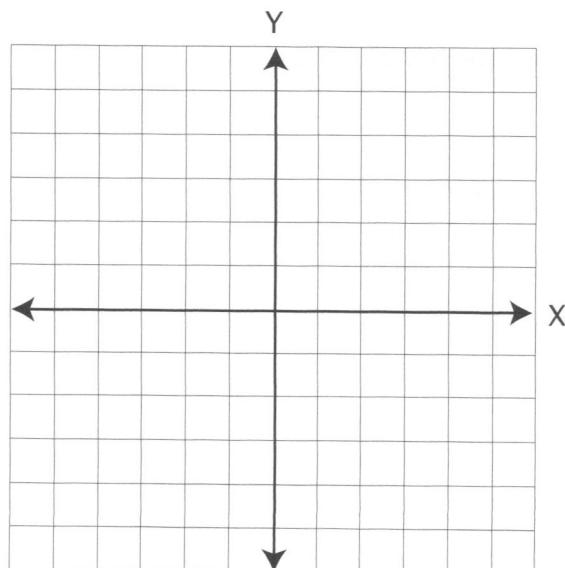
17. If the federal debt of the U.S. is five trillion dollars, and there are 300 million people, and each person gave \$1,000, would that be enough to pay the debt?

18. Solve for X and Y using elimination:

$$24Y + 12X = 36 \text{ and } 5Y - 5X = 10.$$

19. Graph $3Y \leq 2X + 6$.

20. Will the point $(-3, -4)$ satisfy the inequality in #19? $R \neq 0$



SYSTEMATIC REVIEW

Find the factors.

1. $x^2 - 4 =$

2. Check #1 by multiplication.

3. $x^2 - 25 =$

4. Check #3 by multiplication.

Find the missing factor.

5. $x + 2 \overline{) 2x^2 + 7x + 6}$

6. Check #5 by multiplication.

Find the square root.

7. $\sqrt{x^2 + 10x + 25} =$

8. Check #7 by substituting 10 for X, then multiplying to find the product.

Solve using Oriental Squares.

9. $65^2 =$

10.
$$\begin{array}{r} 78 \\ \times 72 \\ \hline \end{array}$$

11. Find the factors of $X^2 + 3X - 4$. 12. Check #11 by multiplication.

13. $(49)^3 = 7^?$

14. What is the slope of $4Y + 8X + 2 = 0$?

15. Distribute and fill in the blanks:

$$(A + B)(C + D + E) = A(\quad + \quad + \quad) + B(\quad + \quad + \quad) =$$

$$\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$$

16. If the federal debt of the U.S. is five trillion dollars, and there are 300 million people, and each person gave \$10,000, would that be enough to pay the debt?

FOR #17-18:

Fill in the table for all the possible whole number options for walking rate and time if the distance is 20 miles.

Rate	Time
20 mph	_____
10 mph	_____
_____	4 hr
4 mph	_____
_____	20 hr

FOR #19-20:

Fill in the table for all the possible whole number options for walking rate and time if the distance is 12 miles.

Rate	Time
12 mph	_____
_____	2 hr
4 mph	_____
3 mph	_____
_____	6 hr
_____	12 hr