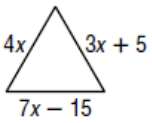
NAME _____ DATE _____ PERIOD ____

SCORE ____

4 Chapter 4 Test, Form 2B

Write the letter for the correct answer in the blank at the right of each question.

1. What is the length of the sides of this equilateral triangle? **1.** ____

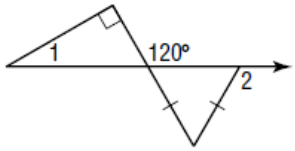


A. 2.5 **C.** 15
B. 5 **D.** 20

2. What is the classification of $\triangle ABC$ with vertices $A(0, 0)$, $B(4, 3)$, and $C(4, -3)$ by its sides? **2.** ____

F. equilateral **G.** isosceles **H.** scalene **J.** right

Use the figure for Questions 3 and 4 and write the letter for the correct answer in the blank at the right of each question.



3. What is $m\angle 1$? **3.** ____

A. 120 **B.** 90 **C.** 60 **D.** 30

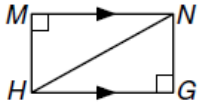
4. What is $m\angle 2$? **4.** ____

F. 120 **G.** 90 **H.** 60 **J.** 30

5. If $\triangle TGS \cong \triangle KEL$, which angle in $\triangle KEL$ corresponds to $\angle T$? **5.** ____

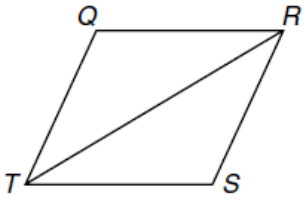
A. $\angle L$ **B.** $\angle E$ **C.** $\angle K$ **D.** $\angle A$

6. Which triangles are congruent in the figure? **6.** ____



F. $\triangle HMN \cong \triangle HGN$ **H.** $\triangle NMH \cong \triangle NGH$
G. $\triangle HMN \cong \triangle NGH$ **J.** $\triangle MNH \cong \triangle HGN$

7. The rhombus $QRST$ is made of two congruent triangles. Given $m\angle QRS = 34$ what is the measure of $\angle S$? **7.** ____

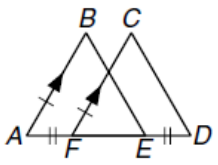


A. 56 **C.** 112
B. 73 **D.** 146

8. The vertices of $\triangle ABC$ are $A(2, 0)$, $B(5, 0)$, $C(2, 6)$. The vertices of $\triangle A'B'C'$ are $A'(-6, -7)$, $B'(-3, 7)$, $C'(-6, -1)$. Which congruence transformation applies to $\triangle ABC$ and $\triangle A'B'C'$? **8.** ____

F. flip **G.** rotation **H.** reflection **J.** translation

9. If $\overline{AF} \cong \overline{DE}$, $\overline{AB} \cong \overline{FC}$ and $\overline{AB} \parallel \overline{FC}$, which theorem or postulate can be used to prove $\triangle ABE \cong \triangle FCD$?

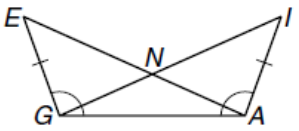


A. AAS **C.** SAS

B. ASA **D.** SSS

9. _____

Use the proof for Questions 10 and 11 and write the letter for the correct answer in the blank at the right of each question.



Given: $\overline{EG} \cong \overline{IA}$; $\angle EGA \cong \angle IAG$

Prove: $\angle GEN \cong \angle AIN$

Statements	Reasons
1. $\overline{EG} \cong \overline{IA}$	1. Given
2. $\angle EGA \cong \angle IAG$	2. Given
3. $\overline{GA} \cong \overline{GA}$	3. Reflexive Property
4. $\triangle EGA \cong \triangle IAG$	4. (Question 10)
5. $\angle GEN \cong \angle AIN$	5. (Question 11)

10. What is the reason for statement 4? **10.** _____

F. SSS **G.** ASA **H.** SAS **J.** AAS

11. What is the reason for statement 5? **11.** _____

A. Alt. int. $\measuredangle$s are $\cong$. **C.** Corr. angles are $\cong$.

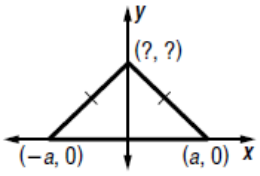
B. Same Side Interior Angles **D.** CPCTC

12. What is the classification of a triangle with vertices $A(-3, -1)$, $B(-2, 2)$, $C(3, 1)$ by its sides? **12.** _____

F. scalene **H.** equilateral

G. isosceles **J.** right

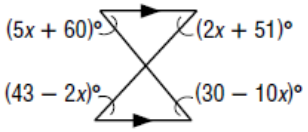
13. What are the missing coordinates of the triangle? **13.** _____



A. $(a, 0)$ **C.** $(c, 0)$

B. $(b, 0)$ **D.** $(0, c)$

Bonus Find x in the triangle.



B: _____

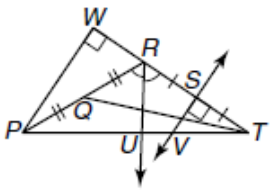
5 Chapter 5 Test, Form 2B

SCORE _____

Assessment

Write the letter for the correct answer in the blank at the right of each question.

For Questions 1–4, refer to the figure.



1. Name a median. 1. _____

A. $\overline{RW}$ **C.** $\overline{QT}$

B. $\overleftrightarrow{SV}$ **D.** $\overrightarrow{RU}$

2. Name an angle bisector. 2. _____

F. $\overline{RW}$ **G.** $\overleftrightarrow{SV}$ **H.** $\overline{QT}$ **J.** $\overrightarrow{RU}$

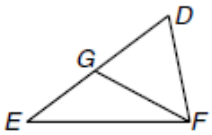
3. Name a perpendicular bisector. 3. _____

A. $\overline{RW}$ **B.** $\overleftrightarrow{SV}$ **C.** $\overline{QT}$ **D.** $\overrightarrow{RU}$

4. Name an altitude. 4. _____

F. $\overline{RW}$ **G.** $\overline{RP}$ **H.** $\overline{QT}$ **J.** $\overrightarrow{RU}$

For Questions 5–7, refer to the figure to determine which is a true statement for the given information.



5. $\overline{FG}$ is an altitude. 5. _____

A. $\angle DGF$ is a right angle. **C.** $DG = GE$

B. $DF = EF$ **D.** $\angle DFG \cong \angle EFG$

6. $\overline{FG}$ is a median. 6. _____

F. $\angle DGF$ is a right angle. **H.** $DG = GE$

G. $DF = EF$ **J.** $\angle DFG \cong \angle EFG$

7. $\overline{FG}$ is an angle bisector. 7. _____

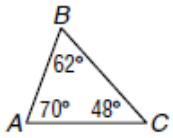
A. $\angle DGF$ is a right angle. **C.** $DG = GE$

B. $DF = EF$ **D.** $\angle DFG \cong \angle EFG$

8. Name the longest side of $\triangle ABC$. 8. _____

F. $\overline{AB}$ **H.** $\overline{AC}$

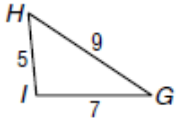
G. $\overline{BC}$ **J.** cannot tell



9. Name the angle with the greatest measure in $\triangle GHI$. 9. _____

A. $\angle G$ **C.** $\angle I$

B. $\angle H$ **D.** cannot tell



Chapter 4

Form 2B
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1. D

2. G

3. D

4. F

5. C

6. G

7. D

8. J

Page 68

9. C

10. H

11. D

12. F

13. D

B: −2

Chapter 5

Form 2B
Page 53

1. C

2. J

3. B

4. F

5. A

6. H

7. D

8. G

9. C