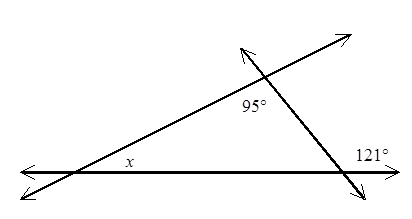
**A. Multiple Choice (2 pts each)**

1. Name an **acute** triangle.

[A]  [B] 

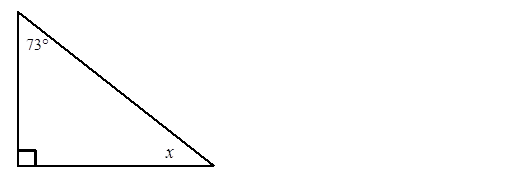
[C]  [D] none of these



2. Find the value of *x*:

[A] 95° [B] 121°

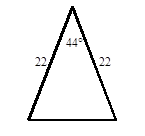
[C] 26° [D] 154°



3. Find the value of *x*.

[A]  [B] 

[C]  [D] 

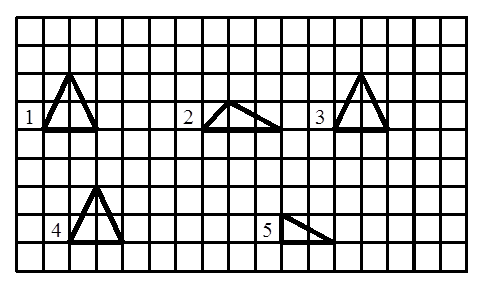
4. What is the measure of each base angle of an isosceles triangle if its vertex angle measures 44 degrees and its 2 congruent sides measure 22 units?

[A] 44° [B] 46°

[C] 136° [D] 68°

5. In , if  and , then \_\_\_\_\_\_. (HINT: Draw the triangle)

[A]  [B] 



[C]  [D] 

6. Which figures appear to be congruent?

[A] 3 and 4 [B] 1 and 3

[C] 1, 3, and 4 [D] 4 and 5

7. If *ABC* *DEF, AB* = 35 feet, *m**B* =25, and *m**F* =63*,* which of the following statements is ***false***? (HINT: Draw a picture)

[A]  [B] 

[C]  [D] ED= 35 ft.

8. What must be true in order for  by the ASA Congruence Postulate?



[A]  [B] 

[C]  [D] 

9. Refer to the figure shown. Which of the following statements is true? (Hint: Mark the given information

[A] 

[B] 

[C] 



[D] 

10. Given: and . What other piece of information is needed to show  by ASA Congruence Postulate?

[A]  [B] 

[C]  =  [D] 

W

11. What is the length of in nearest tenths?

[A] 13.1

[B] 12.0

[C] 9.2

X

Y

[D] 4.1

12. The diagram on right, what is the distance between two points?



[A]  [B] 

[C]  [D] 



**B. Short Answers.**

A

13. Segment  is translated by moving 4 units to the left and 5 units

up. .Give the coordinates of the endpoints of the image. (2 pts)

B

14. Find the measures of all three angles of the triangle.(4 pts)

A

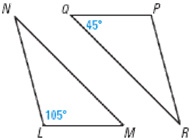


C

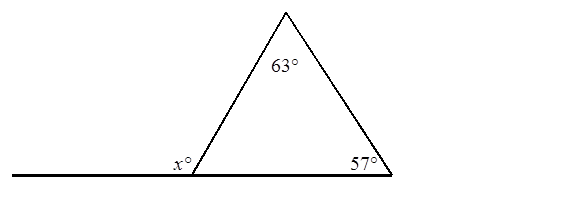
1. x =

B

15. Use the figure to the right.

 , 

1. (1 pt)
2. Find *x (2 pts)*



16. Find the measure of *x*. (1 pt)

**C. Open Response.**

17. Use the diagram to the right to answer the questions

A(-2, 2), B (-7, 7), C(-7, 2)

B

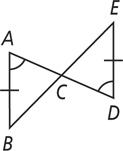
1. **State the coordinates** of the image. Show work or explain how you got your answers. (3 pts)

C

A

1. Find the length of all six sides. Show work or explain how you got your answers. Round to one decimal. (6 pts)
2. Are the two triangles congruent? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (2 points)

If so by what theorem or postulate?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**18. Given:**  ≅ ; ∠*A* ≅ ∠*D (4 pts)*

Prove: Δ*ACB* ≅ Δ*DCE*

|  |  |
| --- | --- |
| **Statements** | **Reasons** |