**Unit 7 Review – Honors Math 2 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

If the triangles in 1 – 3 can be proved similar, (1) Complete the similarity statement and (2) Tell which theorem or postulate you would use. If they cannot be proved similar then write “None.”

1. \_\_\_\_\_\_\_\_\_ by \_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_ by \_\_\_\_\_\_\_\_\_\_\_

3. \_\_\_\_\_\_\_\_\_ by \_\_\_\_\_\_\_\_\_\_\_ 4. \_\_\_\_\_\_\_\_\_ by \_\_\_\_\_\_\_\_\_\_\_

5. \_\_\_\_\_\_\_\_\_ by \_\_\_\_\_\_\_\_\_\_\_



6.

1. What is the scale factor of to ? \_\_\_\_\_\_\_\_\_
2. Find AC. \_\_\_\_\_\_\_\_\_
3. Find DE. \_\_\_\_\_\_\_\_\_

Find the value of x.

7. x = \_\_\_\_\_\_\_\_\_ 8. x = \_\_\_\_\_\_\_\_\_

1. Midsegment of a Triangle:
	1. The midsegment of a triangle joins the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of two sides of a triangle.
	2. The midsegment is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the third side and is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the length of the third side.
2. The sum of the measures of the angles of a triangle is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ theorem.
3. The exterior angle of a triangle is equal to \_\_\_\_\_\_\_\_\_\_\_\_ of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the triangle.
4. Triangle Proportionality Theorem and its converse:
5. A line that is parallel to one side of a triangle divides the other two sides \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. If a line intersects 2 sides of a triangle so that it divides those 2 sides proportionally, then it is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Use the diagram to answer 13 – 14.

1. Name the type of each given angle pair.
2. Given: and . Find the measure of each of the remaining angles.

 , , , ,

 , ,

1. .a) Find the value of m and n. a) m = \_\_\_\_\_\_, n =\_\_\_\_\_\_\_

 b) Find x b) x = \_\_\_\_\_\_\_\_\_\_\_\_

3x + 10

2x + 35

1. Use the diagram below to answer parts a-c

 a) If AE=6x + 5 and BD = 6x + 13. Find CD. \_\_\_\_\_\_\_\_\_\_

 b) FE = 2x + 4 and ED = 7x – 26. Find FD. \_\_\_\_\_\_\_\_\_\_

 c) If the perimeter of ∆ACE= 720, what is the perimeter of ∆FBD.

\_\_\_\_\_\_\_\_\_\_\_

1. Find the measure of angle M.



M

\_\_\_\_\_\_\_\_\_\_\_

1. If , and you are given the following diagram, find the length of .



\_\_\_\_\_\_\_\_\_\_\_