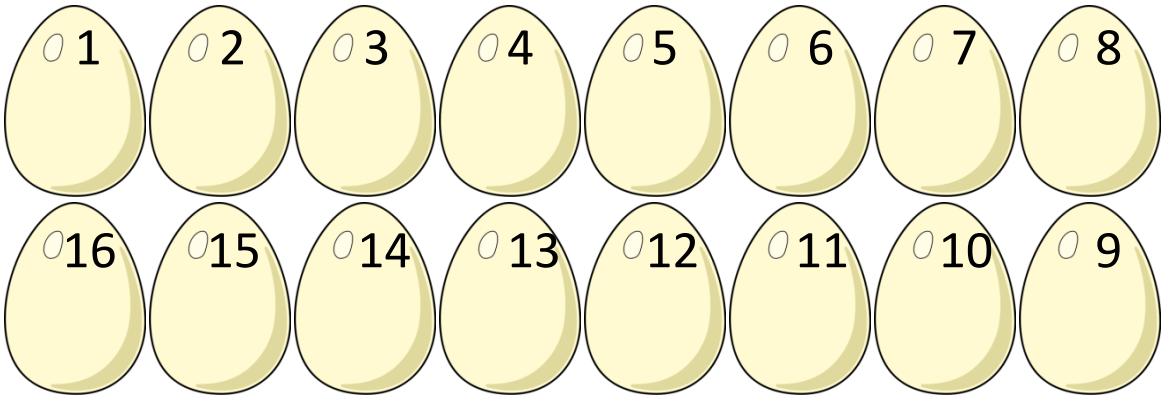
Name: _____ **Due Date**_____

Geometry LAB Review Day 1 – Let Go My EggO (Adapted from MathBits)



Starting Letters:

1-A	9-U
2-O	10-O
3-L	11-I
4-M	12-O
5-K	13-I
6-F	14-A
7-Y	15-R
8-L	16-!

Directions:

1) Write in the starting letters in the corresponding numbered eggs in PENCIL.
2) Read the questions carefully, and move the letters in the eggs accordingly (erase and re-write). SHOW WORK.

☐ 1. The sides of a triangle are 6, 8, and 10. If the shortest side of a similar triangle is 15, what is the length of the longest side?

If the answer is 25, switch Egg[10] with Egg[2].
If the answer is 30, switch Egg[3] with Egg[8].

☐ 2. Similar figures are an example of the transformation called _____.

If the answer is "reflection", switch Egg[3] with Egg[11].
If the answer is "dilation", switch Egg[1] with Egg[5].

☐ 3. In a triangle, two angles measure 55º and 78º. In a second triangle two angles measure 47º and 78º.

If these triangles are similar, switch Egg[4] with Egg[12].
If these triangles are not similar, switch Egg[2] with Egg[7].

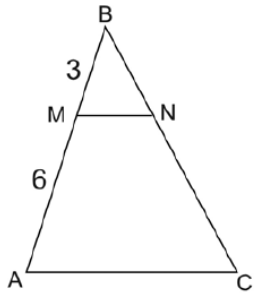
☐ 4. In a right triangle with an angle of 30º, the hypotenuse measures 20. In a second right triangle with an angle of 60º, the hypotenuse must be 40.

If this is true, switch Egg[6] with Egg[10].
If this is false, switch Egg[3] with Egg[8].

☐ 5. Two ladders, one 12' long and the other 20' long, are leaning against the same wall and make the same angle with the ground. If the shorter ladder reaches 9 feet up the wall, how far will the longer ladder reach up the wall?.

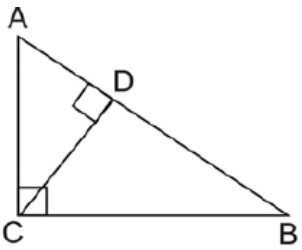
If the answer is 17 feet, switch Egg[6] with Egg[9].
If the answer is 15 feet, switch Egg[6] with Egg[11].

☐ 6. In the diagram, $\overline{MN} \parallel \overline{AC}$, $AM=6$, $MB=3$ and $BC=12$.
What is the length NC?
If the answer is 9, switch Egg[2] with Egg[8].
If the answer is 8, switch Egg[5] with Egg[6].

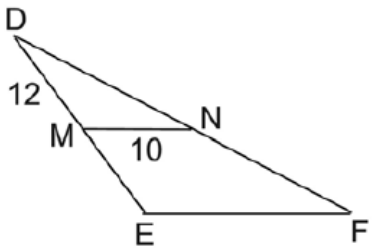


☐ 7. In a triangle the sides are 8, 10 and 12. In a similar triangle the shortest side is 12.
What is the perimeter of the second triangle?
If the perimeter is 45, switch Egg[1] with Egg[11].
If the perimeter is 36, switch Egg[3] with Egg[12].

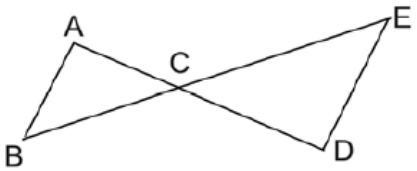
☐ 8. In right triangle ABC, $m\angle C = 90°$ and altitude $\overline{CD}$ is drawn.
ΔCBD is never similar to ΔACD.
If this is true, switch Egg[4] with Egg[13].
If this is false, switch Egg[8] with Egg[12].



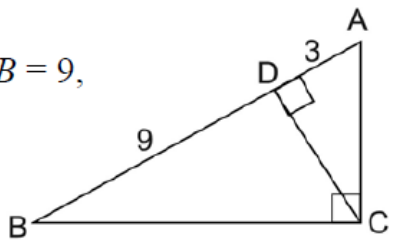
☐ 9. In ΔDEF, $\overline{MN}$ is a mid-line of the triangle. If $DM = 12$ and $MN = 10$, what is EF?
If $EF = 16$, switch Egg[1]with Egg[5].
If $EF = 20$, switch Egg[3] with Egg[4].



☐ 10. In the diagram, if $\overline{AB} \parallel \overline{DE}$ then ΔABC is similar to ΔDEC.
If this statement is true, switch Egg[9] with Egg[3].
If this statement is false, switch Egg[7] with Egg[6].

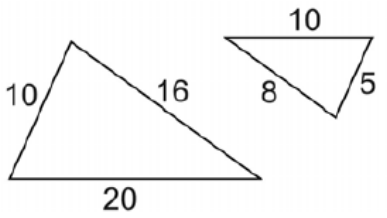


☐ 11. In the diagram $m\angle C = 90°$ and $\overline{CD} \perp \overline{AB}$. If $AD = 3$ and $DB = 9$, find AC.
If $AC = 3\sqrt{3}$, switch Egg[2] with Egg[8].
If $AC = 6$, switch Egg[7] with Egg[10].
You don't know how to do this until unit 8



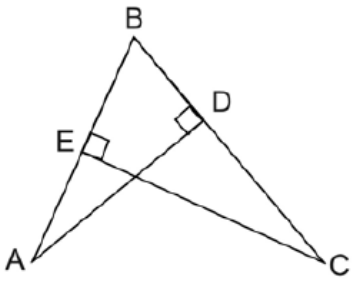
☐ 12. In the diagrams with the lengths of the sides shown, the two triangles are similar.

If this a true statement, switch Egg[7] with Egg[2].
If this is a false statement, switch Egg[6] with Egg[5].



☐ 13. In the diagram $\overline{AD} \perp \overline{BC}$ and $\overline{CE} \perp \overline{BA}$. Is $\Delta ABD \sim \Delta CBE$?

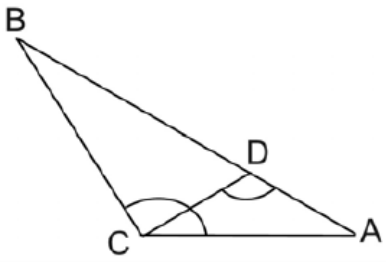
If the answer is yes, switch Egg[9] with Egg[2].
If the answer is no, switch Egg[8] with Egg[7].



☐ 14. In the diagram $\Delta BCA \sim \Delta CDA$. Which is a correct proportion for these triangles?

If it is $\frac{BC}{BA} = \frac{CD}{CA}$, switch Egg[12] with Egg[4].

If it is $\frac{BD}{BC} = \frac{AD}{AC}$, switch Egg[5] with Egg[1].



☐ 15. In right triangle ABC $m\angle C = 90°$ and $\overline{CD} \perp \overline{AB}$. If $AB = 13$, $CD = 6$ and $BD > AD$, what is BD?

If $BD = 7$, switch Egg[5] with Egg[12].
If $BD = 9$, switch Egg[7] with Egg[11].

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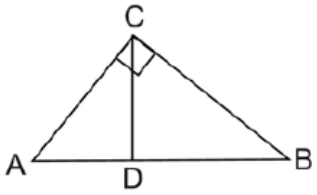
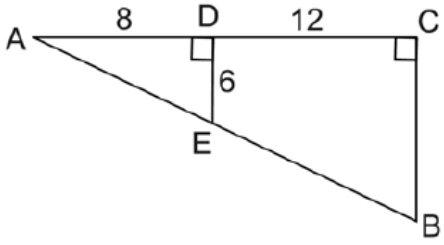


☐ 16. A man 6' tall casts a shadow 10' long and at the same time a tree casts a shadow 25 feet long. How tall is the tree?

If the tree is 15 feet tall, switch Egg[8] with Egg[10].
If the tree is 9 feet tall, switch Egg[4] with Egg[12].

☐ 17. In the diagram, $\overline{ED} \perp \overline{AC}$ and $\overline{BC} \perp \overline{AC}$. If $AD = 8$, $DC = 12$ and $DE = 6$. What is the length BC?



If the answer is 9, switch Egg[10] with Egg[2].
If the answer is 15, switch Egg[9] with Egg[5].

☐ 18. In an equilateral triangle one median of the triangle divides the triangle into 2 smaller similar triangles.

If this is a true statement, switch Egg[8] with Egg[1].
If this is a false statement, switch Egg[2] with Egg[4].

☐ 19. Two regular pentagons, one with a side of length 6 and the other with a side of length 10, are similar polygons.

If this is a true statement, switch Egg[6] with Egg[9].
If this is a false statement, switch Egg[4] with Egg[12].

☐ 20. In two similar right triangles, the hypotenuse of the smaller triangle is 10 while the hypotenuse of the larger triangle is 15. If the area of the smaller triangle is 40, find the area of the larger triangle.

If the answer is 60, switch Egg[5] with Egg[11].
If the answer is 90, switch Egg[6] with Egg[11].

Read the eggs in numerical order to answer the question:

What did one similar triangle say to the other?

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