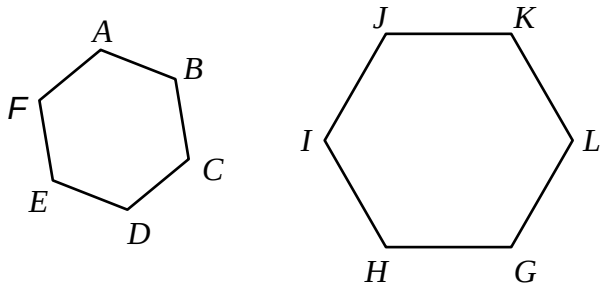
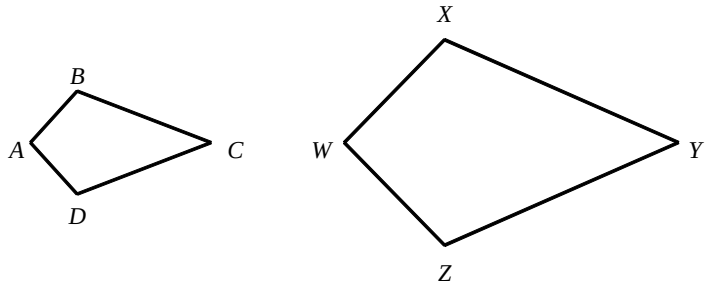
NAME:_____

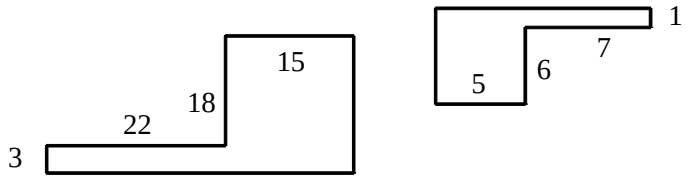
1. In the figure (not drawn to scale), the small hexagon is similar to the larger one. Find length *BC* to the nearest tenth if *KL* = 15, *LG* = 16, and *CD* = 11.



2. The measures of the corresponding sides of the polygons are proportional. If *AD* = 8, *DC* = 3, and *WZ* = 12, find *YZ*. (Not drawn to scale.)



3. Are the two polygons similar? (They are not drawn to scale, but assume all angles are 90°.) If not, explain why.



[A] No; $\frac{5}{15} \neq \frac{6}{3}$ [B] Yes [C] No; $\frac{5}{15} \neq \frac{7}{22}$ [D] not enough information to tell

4. The lengths of two similar rectangles are 45 cm and 42 cm. What is the ratio of the corresponding side lengths?

5. Draw rhombuses with sides of length 2, 4, 5, and so on. Are all the sides proportional? Are the rhombuses similar?

[1] 10.3

[2] 4.5

[3] C

[4] 15 : 14

[5] The sides are proportional, but the rhombuses are not necessarily similar because they can have different angles.