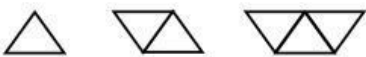NAME: _____ SCORE: _____

Objectives:

1. Identify patterns in sequences.
2. Generate rules from patterns.
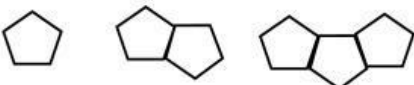3. Solve problems involving sequences.

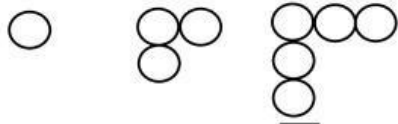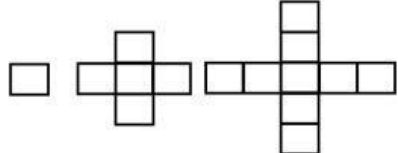**TASKS**

Study the figures below and identify the patterns. What is the number of the next pattern?

A   _____

B   _____

C   _____

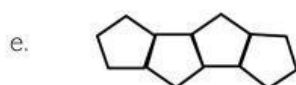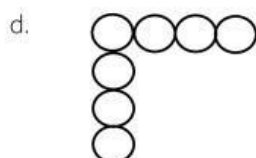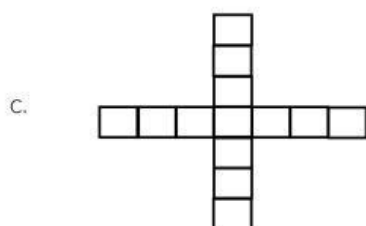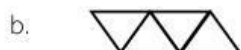D   _____

E   _____
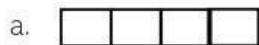
Based on the sequences above, generate the numerical equivalent of each figure. Select your answer on the choices.

A. _____, _____, _____.

B. _____, _____, _____.

C. _____, _____, _____.

D. _____, _____, _____.

E. _____, _____, _____.

Select the next figure for each sequence above. Choose from the choices below.

A	B	C	D	E

a.

b.

c.

d.

e.

 Solve the following problems.

1. Find the next three terms in
   -2, -6, -18, -54, -162.

2. Find the first three terms if the rule is $a_n = 2n^2$.

3. Jim is stacking alphabetic blocks in the pattern shown at the right. The number of blocks in each stack represents the terms in a sequence. What rule describes this pattern?