

# Thinking Outside the Box

## CREATIVE EXERCISES

Albert Einstein is reported to have said that creativity requires taking “a leap into the unknown.” If that statement is true, there are times when creative persons must put their beliefs, reputations and resources on the line. They may suffer the slings and arrows of ridicule because they see things differently, but creative people are able to go against the mainstream. They see things not as they are, but as they could be.

The successful person is not imprisoned by the bars of traditionalism or the frustration of change. Most successful people are usually described as “creative people.” The successful person must look at reality with a different perspective—another point of view.

Respond to each exercise providing what information is requested:

**Exercise #1**  
How many uses can you think of for an *upside down chair*?

**Exercise #2**  
How many uses can you think of for a brick?

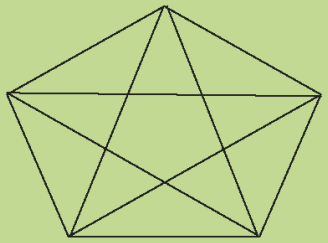
**Exercise #4**  
A rather unusual man is traveling across the country with a tiger, a rabbit and a basket of carrots. The man must transport the tiger, the rabbit and the basket of carrots across the river one by one. This is necessary because the tiger cannot be left alone with the rabbit, and the rabbit cannot be left alone with the basket of carrots. The only means of transportation is a small motorboat that will accommodate only him and one other thing at one time. How can the man transport the tiger, rabbit and carrots across the river safely?

**Exercise #6**  
Three missionaries and three cannibals must cross the river. They can't swim. They have a small motorboat, which will carry only two persons. Each of the missionaries knows how to operate the boat. One missionary can be alone with a cannibal, but if one missionary is left with two cannibals the missionary will be immediately eaten by the two cannibals. How can the missionaries cross the river so that all six are safely delivered on the other side of the river?

**Exercise #3**  
How many cubic inches of dirt are there in a hole 1 foot wide by 1 foot long and 1 foot deep?

**Exercise #5**  
Place a one-dollar bill flat on the table. Turn an empty bottle upside down so that its mouth rests on the center of the bill. Without tipping over the bottle—and allowing nothing to touch the bottle other than the bill or the table—remove the one-dollar bill from beneath the bottle.

**Exercise #7**  
How many triangles are there in this figure?



Solutions to Creative Exercises:

Exercise #1: The students will identify numerous cases for the upside down chair. It is important that the students not laugh, ridicule or hinder student responses if a team approach is taken to this exercise. A flip chart should be prepared listing all the possible uses of an upside down chair.

Exercise #2: This exercise is identical to exercise 1 and should be conducted in a similar manner.

Exercise #3: None. There is no dirt in a hole.

Exercise #4: He should take the rabbit across the river. He returns and takes the basket of carrots across and brings back the rabbit. Then, he takes the tiger across and returns and takes the rabbit across.

Exercise #5: Roll the bill in a tight curl against the neck of the bottle, which will gradually pull the bill from underneath the bottle. The cylinder formed by the rolling bill will prevent the bottle from creeping toward you.

Exercise #6: Let M-1, M-2 and M-3 represent the missionaries and let C-1, C-2 and C-3 represent the cannibals. C-3 is the cannibal to operate the outboard motor. This is how they crossed the river: C-1 and C-3 cross, C-3 returns M-1 and M-3 cross, C-3 returns C-2 and C-3 cross, C-1 and M-2 return M-1 and M-2 cross, C-1 and M-2 return C-2 and C-3 cross, C-3 returns C-1 and C-3 cross, C-3 returns

Exercise #7: How many triangles are there in this figure? 35 triangles.