# Winning the Brain Game 

FIXINGTHE7 FATAL FL A W S OF TH IN K IN G

MATTHEW E. MAY
Bo n us Ma te ri al


Take two pieces of string, and round the wrists of two persons tie the string, as shown. The puzzle is for them to liberate themselves, or for any one else to release them without untying the string.*

[^0]Chapter 2 - Fixation

Can you identify the pattern in the following letters?
AEFHIKLMNTVWXYZBCDGJOPQRSU

Move a single stick to correct the incorrect Roman numeral equation: ||| $+|||=|| |$

Can you rearrange the letters n-e-w-d-o-o-r to make one word?

In what direction is the bus pictured below facing, left or right?


Show how you can make the triangle below point downward by moving only three of the circles.


My favorite example* enabling you to actually experience Fixation in action is to gaze at the three sets of right-angled lines below for a moment. I should tell you that they depict something so ubiquitous that you'd be hard-pressed to make it through the day without it. Can you identify it?


[^1]
## EXPERIMENT DESIGN TEMPLATE

| CONDITIONS |  |
| :--- | :--- |
| Which of our what must be <br> true? assumptions are we most <br> worried might not be true? | Why is it so worrisome? |
| HYPOTHESIS | What is our testable belief about <br> future value creation? <br> "We believe [action/capability] <br> will likely result in [desired <br> outcome], with [metric] <br> [significantly changed]." |
| What must we learn? | What is the target metric that <br> will be our standard of proof that <br> helps determine pass/fail? |
| How will we test our hypothesis? |  |

For example, take a look at a more difficult insight problem involving an incorrect Roman numeral equation, like the one I showed you in Chapter 2 (Fixation). In this one, you cannot move or alter in any way either the plus sign or the equals sign. The challenge: Imagine that the numbers are moveable sticks. Leaving the plus and equals signs as they are, what is the least number of sticks you would have to move to correct the equation?*

$$
\mathrm{XI}+\mathrm{I}=\mathrm{X}
$$

[^2]
## YOUR KNOWLEDGE NETWORK



## APPENDIX A <br> Solution to The <br> Prisoner's Release



STEP 2


FINISH

## APPENDIXB

## Solutions to Chapter 2 Insight Problems

1. An unemployed woman who did not have her driver's license with her failed to stop at a railroad crossing, then ignored a one-way traffic sign and traveled three blocks in the wrong direction down the one-way street. All this was observed by a nearby police officer, who was on duty, yet made no effort to issue the woman a ticket for violating the laws. Why?

SOLUTION: The woman was a pedestrian.
2. A man leaves for a horsepacking trip on Sunday. He returns on Sunday, yet was gone for exactly 10 straight days, without crossing international date lines. How is this possible?

SOLUTION: The horse's name is Sunday.
3. A young boy turned off the lights in his bedroom and managed to get into bed before the room was dark. If the bed is 10 feet from the light switch and the light bulb and he used no wires, strings, or other contraptions to turn off the light, how did he do it?

SOLUTION: It was during the day.
4. Mr. Hardy was washing windows on a high-rise office building when he slipped and fell off a 60 -foot ladder onto the concrete sidewalk below. Incredibly, he did not injure himself in any way. How is this possible?

SOLUTION: Mr. Hardy was on the first rung of the ladder.
5. Can you identify the pattern in the following letters?

## AEFHIKLMNTVWXYZBCDGJOPORSU

SOLUTION: all letters in the alphabet made with only straight lines followed by those with curves.
6. Can you think of a word that forms a phrase with each of the following words: shot, plate, and broken?

SOLUTION: Glass
7. Move a single stick to correct the incorrect Roman numeral equation: ||| $+|||=|| |$

SOLUTION: ||| = ||| = |||
8. There are three switches outside a closed room. There are three lamps inside the room. You can flip the switches as much as you want while the door is closed, but then you must enter just once and determine which switch is connected to which lamp. How can you do it?

SOLUTION: Switch the first one on for a minute, then turn it off and turn the second one on. Enter the room and feel the two bulbs that are off. The warm one was turned on by the first switch, the light that is now on is connected to the second, and the other to the third.
9. A dealer in antique coins got an offer to buy a beautiful bronze coin. The coin had an emperor's head on one side and the date 544 BC stamped on the other. The dealer examined the coin, but instead of buying it, he called the police. Why?

SOLUTION: In 544 BC, Christ would not be born for another 544 years, so "BC" would not have been stamped on an authentic coin.
10. Juliette and Jennifer were born on the same day of the same month of the same year to the same mother and the same father, yet they are not twins. How is that possible?

SOLUTION: They are part of a set of triplets . . . or any sibling set more than twins.
11. Can you rearrange the letters n-e-w-d-o-o-r to make one word?

SOLUTION: One word
12. A prisoner was attempting to escape from a tower. He found in his cell a rope that was only half the length needed to reach the ground safely. He divided the rope in half, tied the two parts together, and escaped. How could he have done this?

SOLUTION: He divided the rope lengthwise.


[^0]:    * The original directions also include: "It adds to the amusement of the puzzle if one of the persons is a lady and the other a gentleman." I've tried this. They are correct.

[^1]:    * I first introduced this exercise in my 2009 book In Pursuit of Elegance as a metaphorical example of an elegant solution.

[^2]:    * In case you forget your Roman numerals, the equation reads, " 11 plus 1 equals 10 ," which is obviously incorrect.

