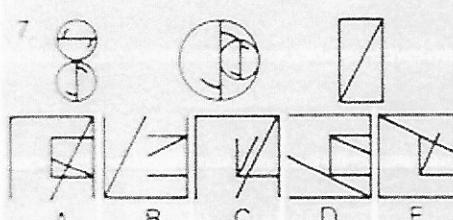
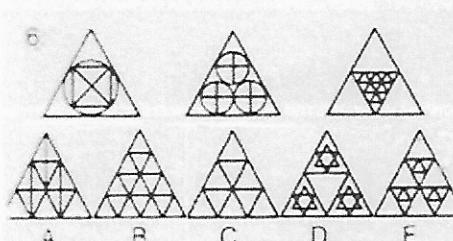
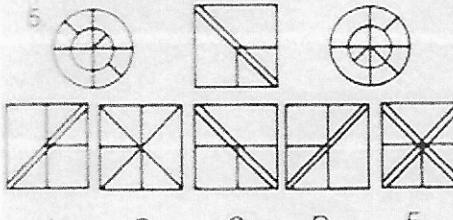
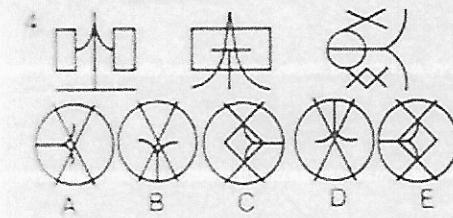
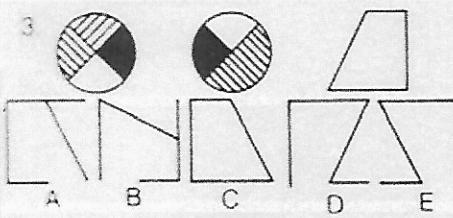
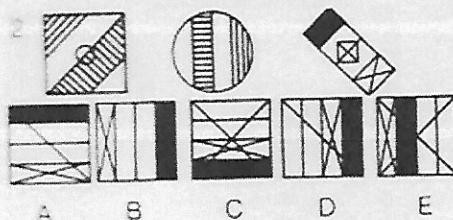
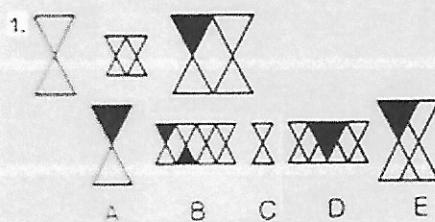


PART I FIGURE ANALOGIES INSTRUCTIONS

Each item in this section has 3 figures on 1 line, followed by 5 lettered figures on the line below. Choose the letter of the figure that is related to the 3rd figure on the 1st line in the same way that the 2nd figure is related to the 1st.



PART II
NUMBER SERIES

9. 5 8 17 24 37
A. 46 B. 48 C. 53 D. 62 E. 65

10. 1 3 4 8 15 27 50
A. 88 B. 90 C. 92 D. 94 E. 96

11. 7 10 5 9 3 8 2
A. 5 B. 6 C. 8 D. 9 E. 10

12. 5 7 3 1 4 5 9 5
A. 1 B. 2 C. 4 D. 5 E. 7

13. 8 10 7 12 5 16 3
A. 17 B. 18 C. 20 D. 21 E. 22

14. 11 13 17 25 32 37 47 58 71
A. 79 B. 83 C. 88 D. 92 E. 97

15. 2 3 6 10 17 28
2+3+1, 3+5-1, 5-10+1, 10-17+1, 17-28+1= 46
A. 41 B. 42 C. 44 D. 46 E. 47

16. 6 6 4 8 4 12 4 16
+0,-2,-4,-4,+8,-8,+12,-12 (16-12=4)
A. 0 B. 4 C. 6 D. 8 E. 12

PART III
VOCABULARY

INSTRUCTIONS: Each item in this section consists of two words on one line, followed by five lettered words on the line below. Choose the letter of the word on the second line that is not a synonym for either of the words on the first line.

17. set pass
A. impose B. invert C. adjust D. happen E. pronounce

18. render port
A. translate B. carry C. melt D. settle E. left

19. state mind
A. object B. interpret C. ceremonial D. opinion E. express

20. mean register
A. range B. intend C. condition D. poor E. align

21. check stock
A. enter B. restrain C. broth D. draft E. security

22. bear subject
A. cast B. prone C. head D. expose E. stand

23. sound spring
A. measure B. warp C. release D. logical E. scale

24. pitch charge
A. responsibility B. potential C. angle D. term E. frequency

PART IV

34.

EXTRANEous FIGURES

INSTRUCTIONS: For each numbered set of figures, choose the letter of the figure that does not belong with the other four.

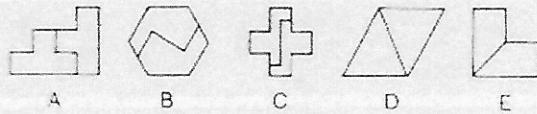
25.



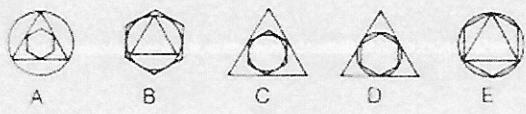
26.



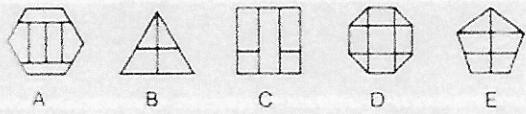
27.



28.



29.



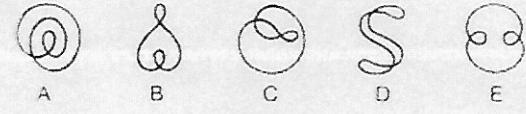
30.



31.

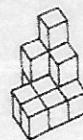


32.



If three gallons of paint are required to paint all sides of one cube, how many gallons will be required to paint all exterior surfaces of the figure shown? (Three cubes in the lower right rear corner are not visible.)

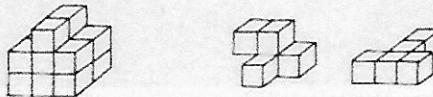
- A. 19 B. 20 C. 21 D. 22 E. 23



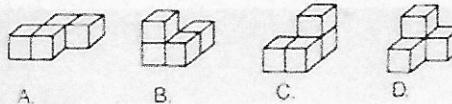
35. What is the maximum number of cubes that can be piled on the squares of a five-by-five-square board, with the side of each square equal to that of each cube and with no square piled more than three cubes high, such that all cubes are visible?

- A. 62 B. 63 C. 66 D. 68 E. 69

36.

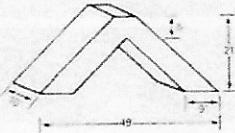


The large solid figure at the left above is taken apart into three pieces. Two of the pieces are shown at the right above. Which of the following is the third piece?



- E. none of the above

37.



How high a tower can be built using seven blocks with the dimensions shown above without rotating any block more than ninety degrees from the orientation shown?

- A. under 67" B. 67–71" C. 72–76" D. 77–81" E. over 81"

38.



Assuming that two holes go all the way through the cube and the third only halfway through, what is the total number of faces of the body shown above?

- A. 22 B. 23 C. 24 D. 25 E. 26

39.



What is the maximum total number of faces of the pieces produced by one plane cut through the figure shown?

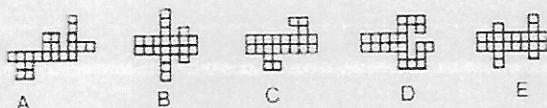
- A. 18 B. 19 C. 20 D. 21 E. 22

40.



Which of the following could be folded to make the six-cube solid shown above? (Ignore the difference in scale.)

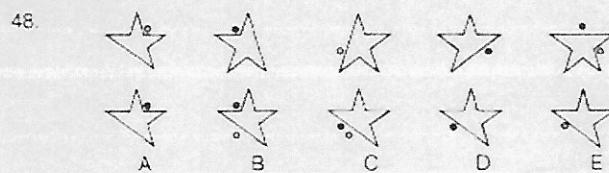
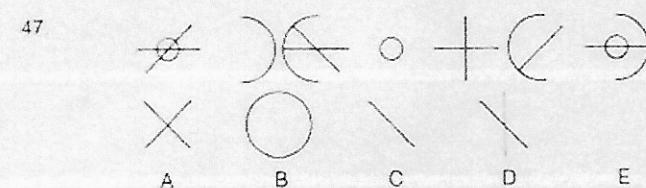
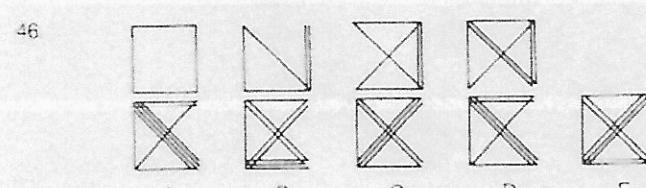
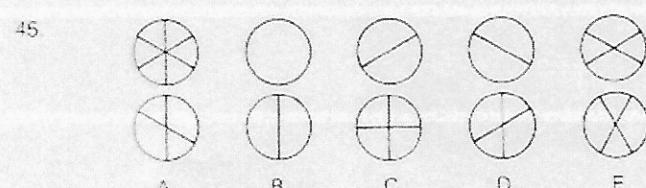
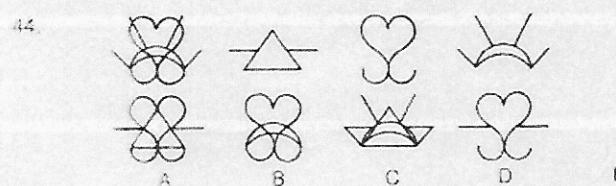
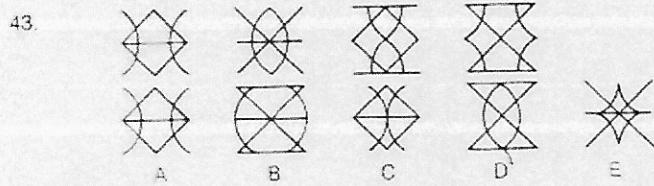
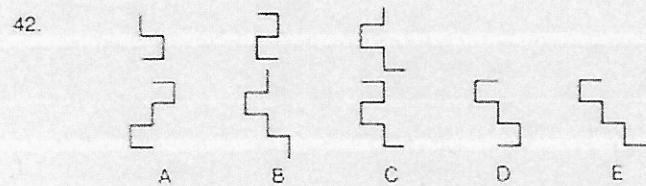
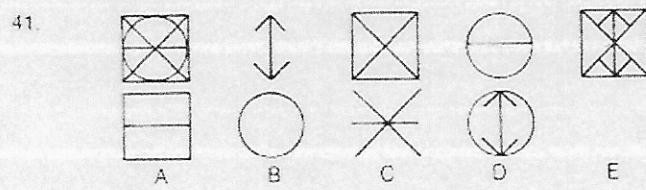
- A. only 2 B. 2 or 3 C. 2 or 4 D. 3 or 4 E. 2, 3, or 4



PART VI

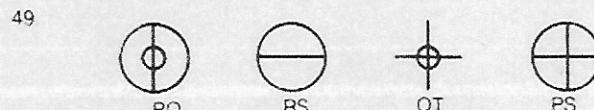
FIGURE SERIES

INSTRUCTIONS: Each item in this section consists of a sequence of figures on one line, followed by five lettered figures on the line below. Choose the letter of the figure on the second line that continues the progression of the first line.

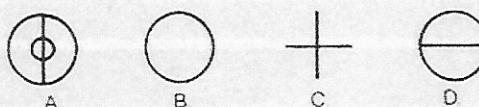


PART VII

PROBLEM SOLVING



Which of the following is PR?



E. none of the above

50. How many different ways are there to connect six points arranged in a regular hexagonal array with a continuous path consisting of five straight lines meeting only at these points?

- A. 42 B. 48 C. 54 D. 60 E. 72

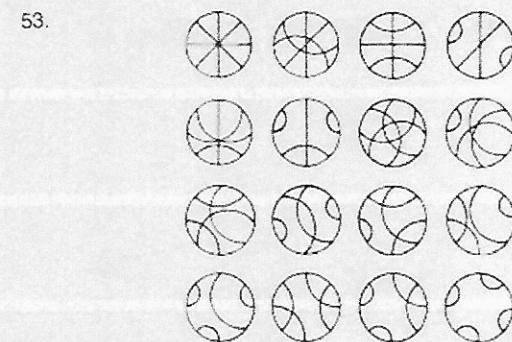
51. One third of the members of a parliamentary body are elected every two years. The body has six committees. Each member of the body is a member of at least one committee, and no member is a member of more than two committees. No committee has more than even members. Each pair of committees has exactly two members in common. The chairman is a member of the Rules Committee and of no other committee. Each member of the Budget Committee is also a member of another committee. The last digit of the number of members of the parliamentary body is

- A. 2 B. 3 C. 4 D. 6

E. It cannot be determined from the information given.

52. To begin playing a certain card game, an ordinary deck of playing cards is dealt out completely to four players. Each player looks at his cards and passes one card to the player on his left. A player does not look at the card passed to him until he has passed a card. If a player has more than one king, he must pass a king; if he has only one king, he may not pass it. How many rounds of passing are necessary to insure that each player has one king?

- A. 3 B. 4 C. 5 D. 6 E. 7



The missing pattern:

- A. belongs in the third row.
 B. is asymmetrical.
 C. contains the same elements as one of the patterns above, but in a different order.
 D. does not contain a straight line.
 E. satisfies none of the above conditions

54 A certain country manufactures coins in eight integral denominations from 1 piaster to 300 piasters. The ratios between adjacent denominations are all either 2, 2½, or 3. To purchase a 69-piaster souvenir, a tourist gives the seller one coin and receives one coin in exchange.

Which of the following is true?

- A There are both 5-piaster and 30-piaster coins
- B There is a 5-piaster coin but no 30-piaster coin
- C There is a 30-piaster coin but no 5-piaster coin
- D There is neither a 5-piaster nor a 30-piaster coin
- E None of the alternatives above can be positively established from the information given.

55. A man plays a game of Russian roulette in the following way. He puts two bullets in a six-chamber cylinder and pulls the trigger twice. The cylinder is spun before the first shot, but it may or may not be spun after putting in the first bullet and after taking the first shot.

Which of the following situations produces the lowest probability of survival?

- A Spinning the cylinder after loading the first bullet, and spinning again after the first shot
- B Spinning the cylinder after loading the first bullet only

- C Spinning the cylinder after firing the first shot only
- D Not spinning the cylinder either after loading the first bullet or after the first shot
- E The probability is the same for all cases.

56. You are given:

- a 2½-gallon container full of water;
- an empty 1-gallon container;
- a 1½-pound weight;
- a 2½-pound weight;
- a 4½-pound weight;
- a 6½-pound weight; and
- a 2-pan balance.

Each container weighs five pounds. A pint of water weighs one pound. One of the weights is slightly inaccurate—either lighter or heavier than the weight indicated above. Which weight is inaccurate and in which direction?

- A can be determined in three weighings
- B can be determined in four weighings
- C can be determined as to which weight in two weighings, but which direction it is off cannot necessarily be determined
- D can be determined as to which weight in three weighings, but which direction it is off cannot necessarily be determined
- E cannot be determined from the given conditions. ☐

THE WORLD'S HARDEST IQ TEST: By Scott Morris

Perhaps the ultimate combination of challenge and threat is an IQ test. Taking one forces you into a self-confrontation on the most personal ego-involved level—an anxiety-arousing experience for anyone. If you've ever gotten nervous taking an intelligence test, here's one that will make you break out into a cold sweat just from looking at the questions. It is the most difficult IQ test ever designed to measure the intellectual stratosphere: IQ's between 125 and 180.

It is, as far as we know, the only IQ test that is unsupervised and untimed. You are bound on your honor to take it alone and without help, but you may spend as long as you want on it—an hour, a day, or a month. What matters is not the time it takes you to ferret out the correct answers, nor any special knowledge or expertise you may have, but your powers of attention and your ability to follow a problem through to its logical solution. These problems can be viewed from a number of different angles. To solve them, you must be able to take all parts at once, wrap your mind around the whole thing, and move through the chain of reasoning without getting lost.

Any test discriminates most accurately in the middle of its range. On ordinary IQ tests, such as the Wechsler or Stanford-Binet scales, the average scores cluster around 100, and the tests best measure IQ's near that number; they become increasingly unreliable on IQ's that are extremely high or low. The reason is that ordinary intelligence tests are designed for use with ordinary people, and there are a lot of them with IQ's near the mean, the 100 mark. There are relatively few people with extremely high IQ's, so ordinary tests don't include many questions to discriminate fine differences among them.

This test is different. Out of about 3,000 persons who have ordered copies of it, approximately 500 have bothered—or dared—to complete it and send in their answer sheets. The average of these, with about 58 percent correct answers, had IQ scores just short of 150. Pure guesswork would net you about 20 percent correct answers and an IQ "score" somewhere in the subterranean marsh of below 125. This test is most effective in measuring IQ's between 130 and 170.

This test was devised two years ago by Kevin Langdon, a San Francisco systems and procedures analyst and a member of Mensa, the international high-IQ club. Mensa's only criterion for membership is an IQ-test score in the upper 2 percent of the population, that is, at or above the ninety-eighth percentile (corresponding to an IQ of 133 on the Stanford-Binet or a score of 1300 on the Scholastic Aptitude Test or 1250 on the Graduate Record Examination).

Langdon wanted a way to discriminate among his fellow Mensans, to define a subgroup of persons at the very highest intelligence levels. Langdon's group is called the

OMNI MAGAZINE 4/1985

Four Sigma Society and has about thirty-five members. You can qualify for membership by getting 85 percent or more of the test items correct, a level comparable to a Stanford-Binet IQ of 164 or better, which puts you above the 99.997th percentile. Approximately one person in 30 thousand meets this standard. The name refers to the statistical term for standard deviation. Four Sigma members exhibit a tested intelligence level four or more standard-deviation units above the general population mean.

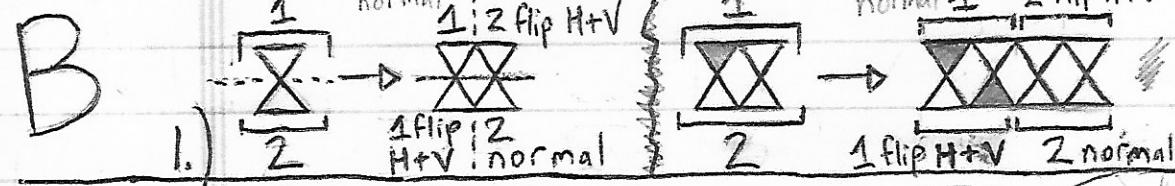
Langdon confesses that one of the reasons he devised this test and founded the Four Sigma Society was to meet women he wouldn't have to talk down to. But of those who have qualified for Four Sigma membership so far, only one in seven is female. "I think it has been rather conclusively shown," he says by way of explanation, "that the distribution of intelligence for men and women is not the same. The IQ's of women tend to be clustered in the middle. There are both more geniuses and more idiots among men."

On the following pages, *Omni* presents the Langdon Adult Intelligence Test in its entirety. Instructions to some items may seem opaque or ambiguous, but a close look at the questions and answers will show that only one interpretation is correct. Part of what the test measures is the ability to understand the questions clearly in their stated form. Simplifying the wording of an item or giving clarifying examples would change one's chances of correctly answering it. This would invalidate the test score, making it not comparable to previous norms. Against some editorial impulses, then, we present the test with its original wording intact.

If you decide to take the test, fill in the answer sheet on page 120 to the best of your ability. You needn't do it all in one sitting, though you will probably make a better score if you complete the test in one or a few concentrated periods. Your IQ and percentile scores will be computed on the basis of your raw score. Your raw score will be proportional to the number of items you answer correctly minus one-fourth of the number of items answered incorrectly. No credit will be given for unanswered items. Items marked with more than one answer will be counted wrong. Mark the answer sheet the way you want it scored and send it (or a Xerox copy), along with any comments you wish to call to the test maker's attention, and a \$2.50 scoring fee, to Four Sigma Society P.O. Box 795, Berkeley Calif. 94701. (Make checks payable to Four Sigma Society.) You will receive a computer-generated score report form telling you your measured IQ (as well as subscore IQ's for verbal, spatial, and inductive reasoning), along with the percentiles these scores correspond to in the general adult population. You will also get a full statistical report on the test's norms.

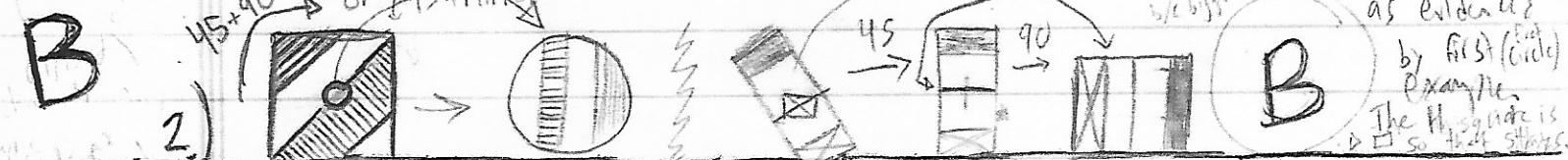
If you decide not to take the test just now, we understand. It will always be here, in your *Omni*, waiting.

Part 1: Figure Analogies

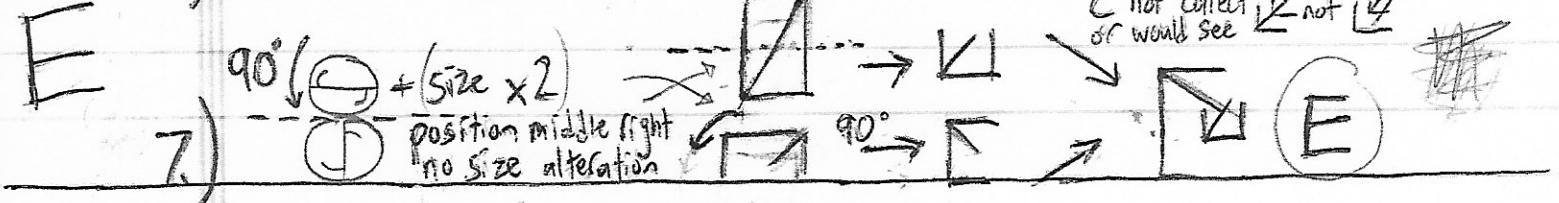
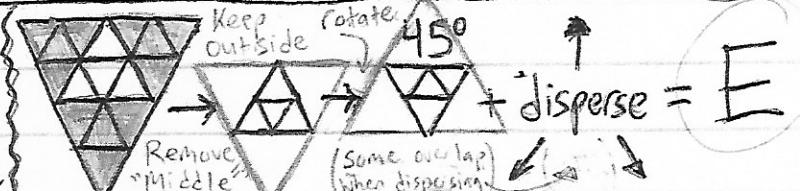
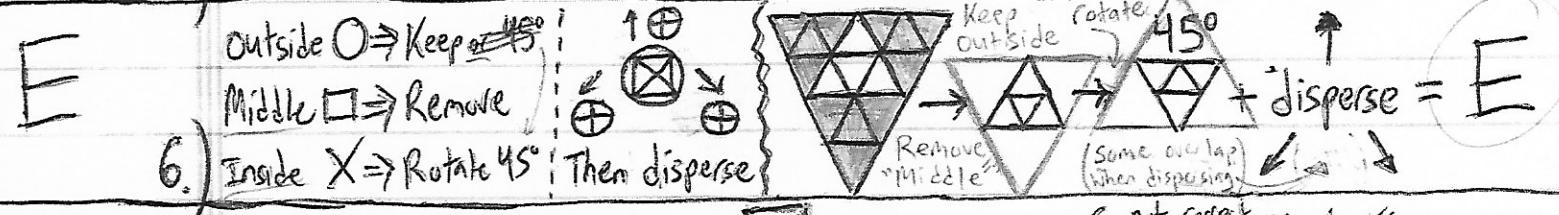
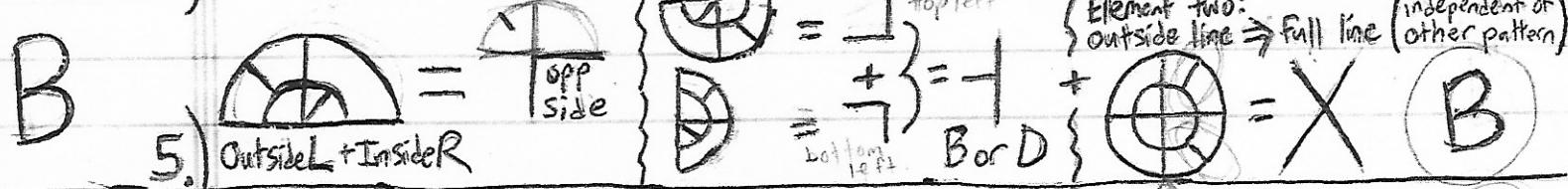
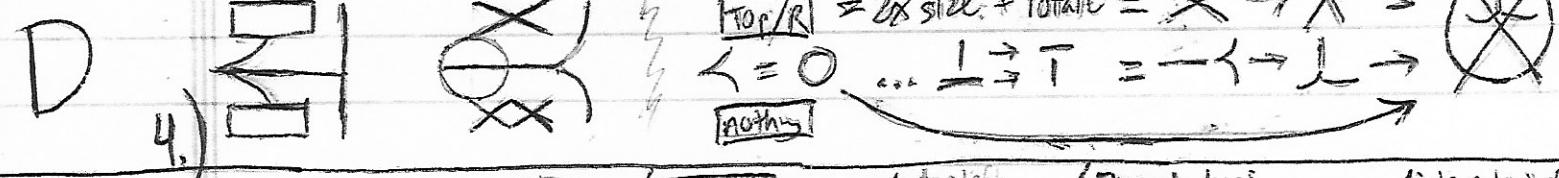
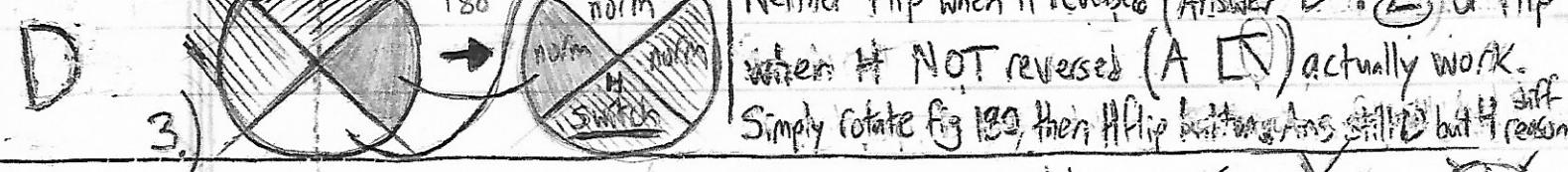


(Also figs
become smaller)

B

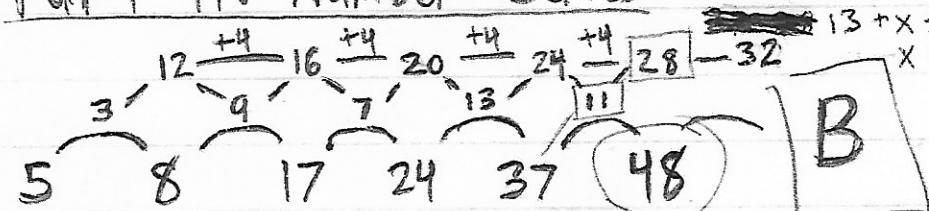


The shape size doesn't matter
as evidence by (E) example.
by flip (circle)
The H sign is
so that shape.

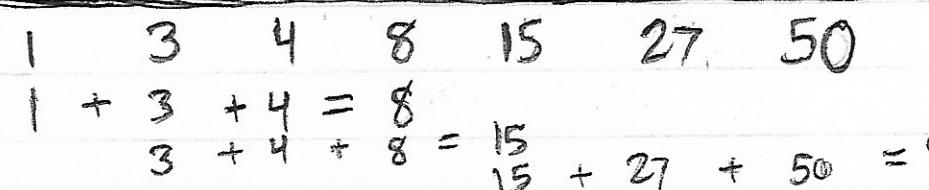


8.)

Part II: Number Series

B 9.)  **B**

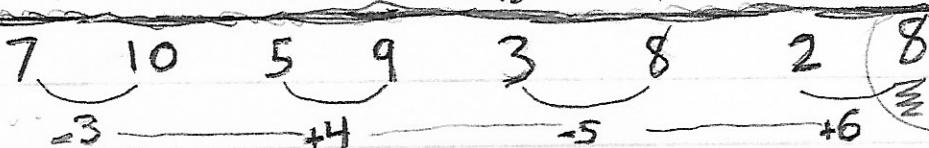
$$5 + 3 = 8 + 9 = 17 + 7 = 24 + 13 = 37 + 11 = 48$$

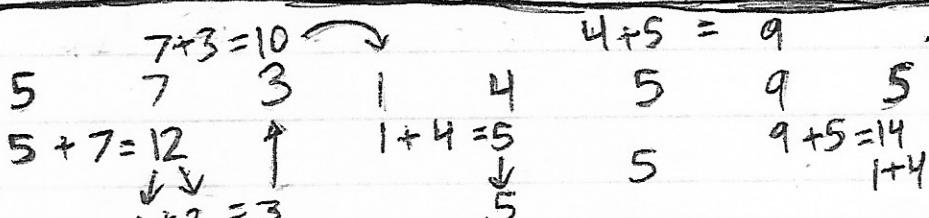
C 10.)  **92 C**

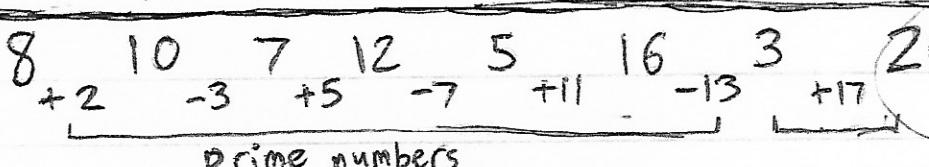
$$1 + 3 + 4 = 8$$

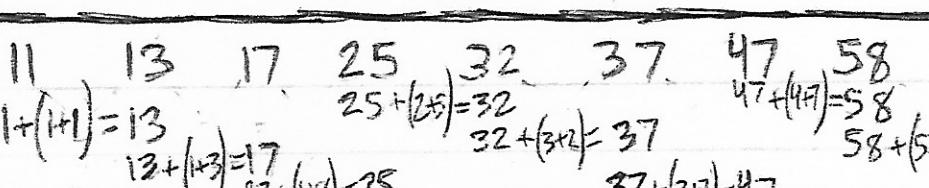
$$3 + 4 + 8 = 15$$

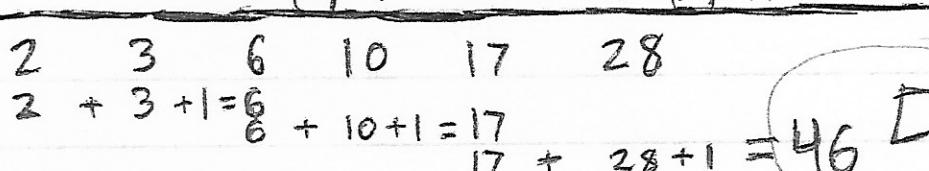
$$15 + 27 + 50 = 92$$

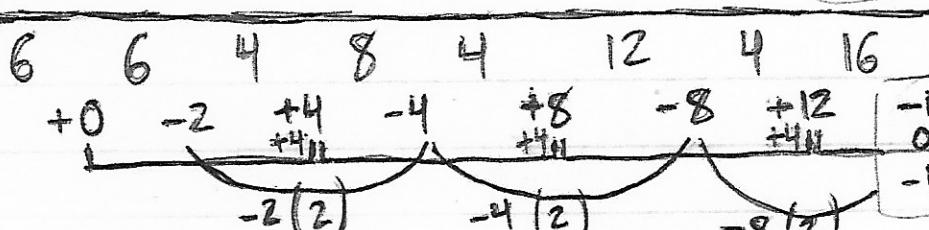
C 11.)  **C**

D 12.)  **5 D**

C 13.)  **20 C**

A 14.)  **79 A**

D 15.)  **46 D**

A 16.)  **0 A**

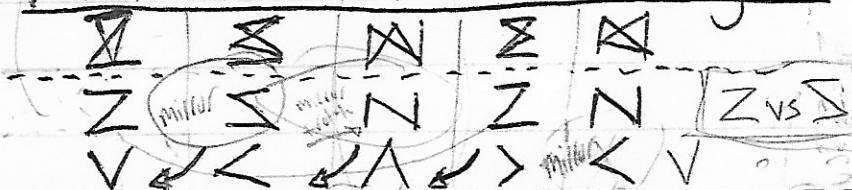
-16 better explains the starting 0, rather than starting +2

Part III: Vocabulary

- B 17) Set pass "Ready Set Go"
- ~~impose~~ invert sun sets
set rules sun sets
~~impose rules~~ below
- ~~adjust~~ happen pronounce
Set clock "Has come" pronunciation judgment pass agreement
daylight savings to pass
-
- D 18) render port fat/wax rendering
translate carry melt
"rendered into" port is to carry to melt down
renders null
- ~~carry~~ melt
Settle D left
port is in left side
-
- C 19) State mind such something
object interpret ceremonial opinion
"Do you mind?" "mind the gap?" most likely "Speak your mind" → state your opinion
"mind the gap" → state your opinion
-
- C 20) mean register mean → avg → metric
range intend metric range
musical range what did you mean to say?
intend condition align
what did you mean to say? can think of nothing poor average in negative light image registration is image alignment
-
- A 21) check stock security
enter restrain draft
check yourself before you wreck yourself check
check yourself before you wreck yourself
- stock book
restrain check
book stock
draft check
security as a financial instrument
-
- A 22) bear subject
cast prone head expose stand
can't shake prone to subject to bear right subject to you lies cannot bear cannot stand
-
- B 23) sound spring scale
measure warp release logical
sound out someone = examination close warp spring into action "Sound reasoning"
scale musical usage
-
- A 24) pitch change term frequency
responsibility potential angle
not sync but could think of zero for this potential angle pitch/ yaw as basic unit
pitch → tone → frequency

Part IV: Extraneous Figures

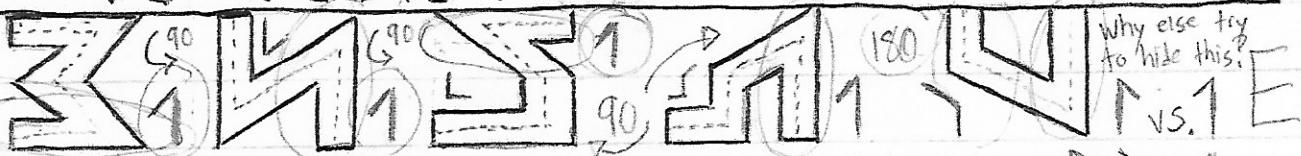
B



B does not contain Z

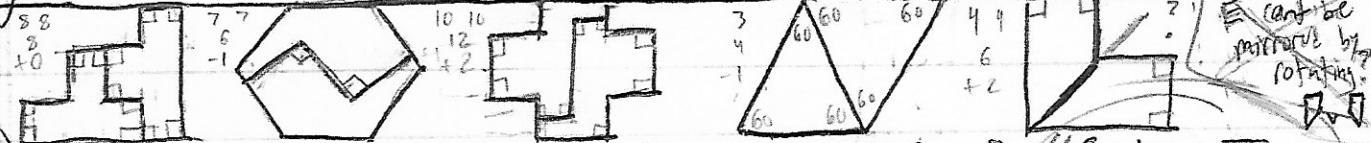
25)

E



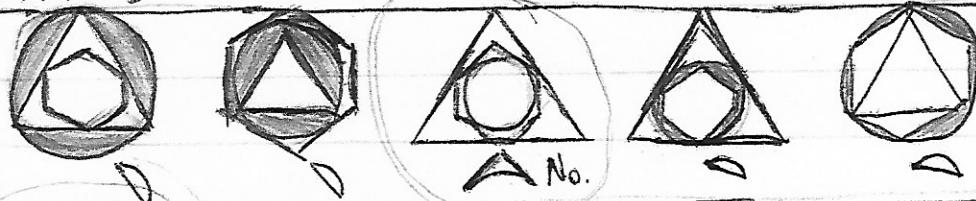
26) All figures contain 1 except for E which only contains mirror P. 1 vs. 1

D



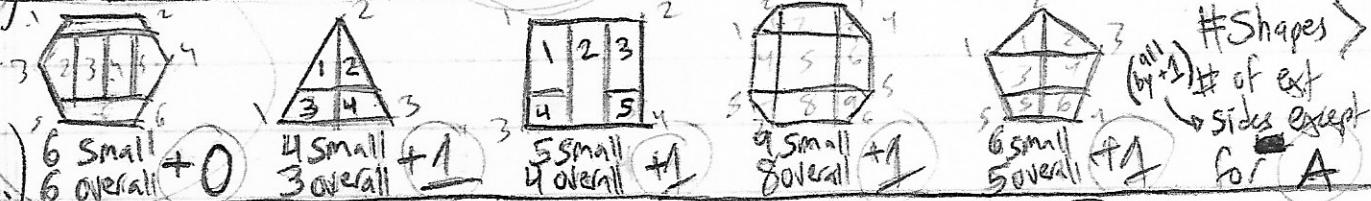
27) All figures have at least one 90° angle except for D. // Contains L

C



28)

A



29.) 6 small + 0
6 overall

4 small + 1
3 overall

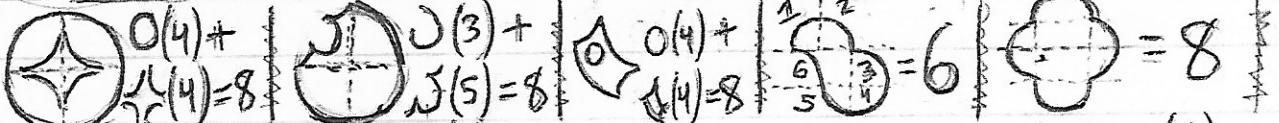
5 small + 1
4 overall

9 small + 1
8 overall

6 small + 1
5 overall

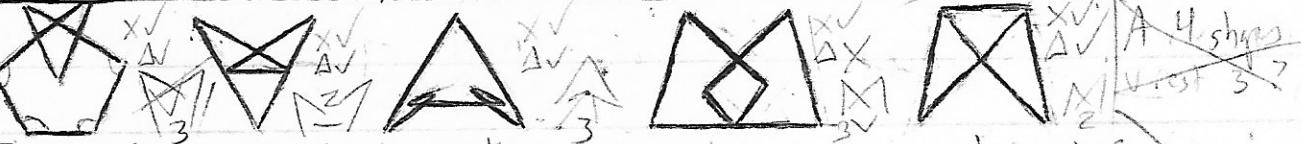
Shapes >
(all + 1)
of ext sides except for A

D



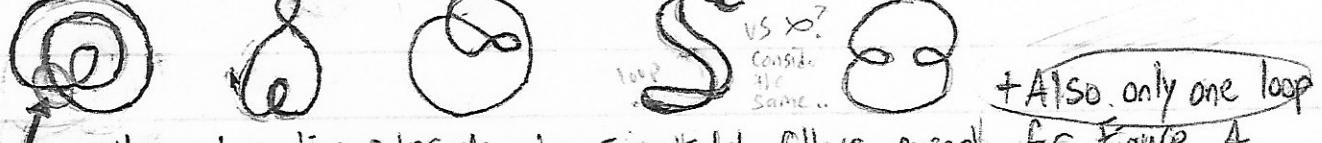
30.) Each shape has exactly (8) quarter circles L except for D which has (6).

D



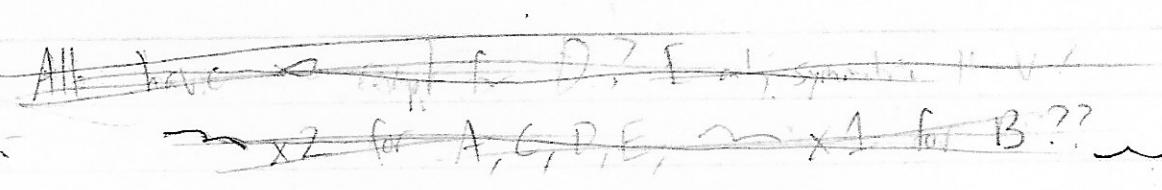
31.) D is the only figure which does not contain any triangles.

A

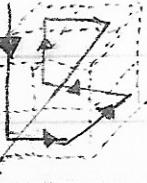
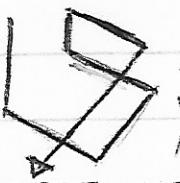
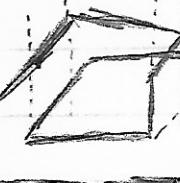
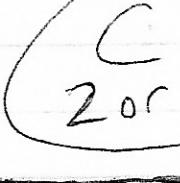


32.) Where two lines intersect, a loop immediately follows, except for Figure A.

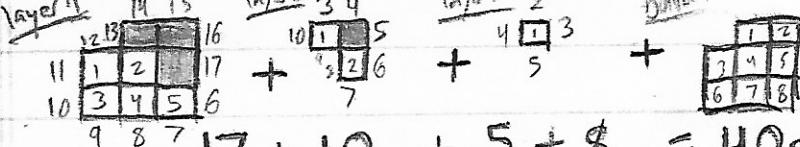
B



Part V: Spatial Orientation

C 33) a hole, not multiple, (assumed can't leave cube) (possibly exit, once = no doubling back.)   2 yes  4 yes.  C 2 or 4

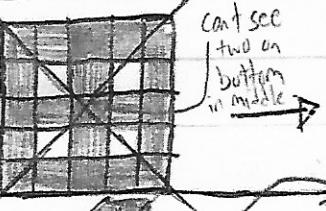
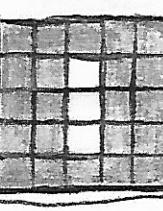
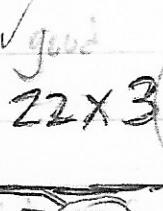
B

34) 

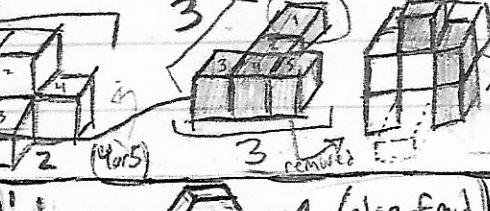
$$17 + 10 + 5 + 8 = 40 \text{ sides}$$

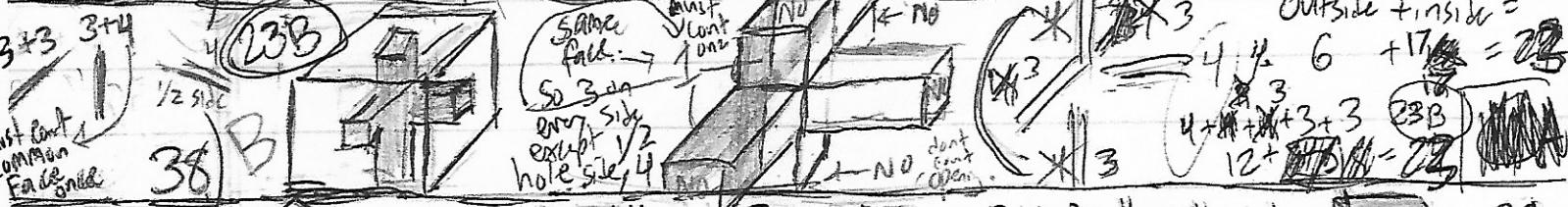
3 gallons = one cube = 6 sides
1 gallon = 2 sides
40 sides = 20 gallons B

C

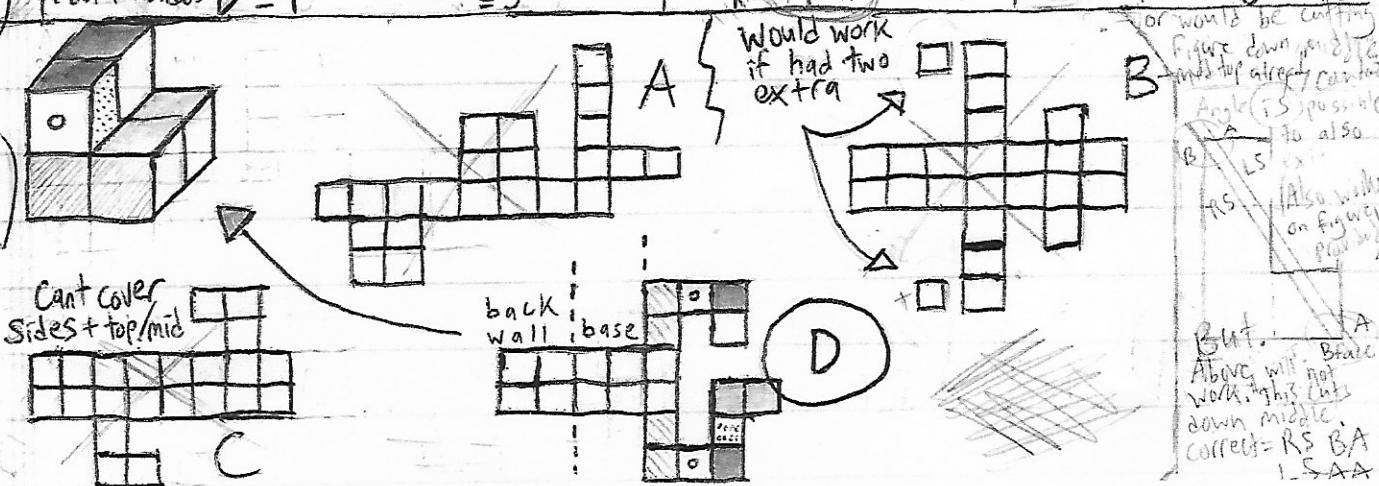
35)   good  22 x 3 = 66 C

E 36) $12 + 2 + 1 \text{ hidden } 2$
 $15 - 5 - (4 \text{ or } 5) = 6 \text{ or } 5$ 

E 37) $6 \times 10 = 60$ (both 48w) top: $\times 1 \text{ (edge of mid)} = 21$ Base points off center of mass to balance after adding top piece
 $+ 21 \text{ (on top)}$ middle: $\times 4 \text{ (stacked)} = 40$ Fairly easy to balance w/ 2 bases
So, only Q is if any config > 81 bottom: $\times 2 \text{ (base, rotated)} = 21$ $= 82$ 

38) 

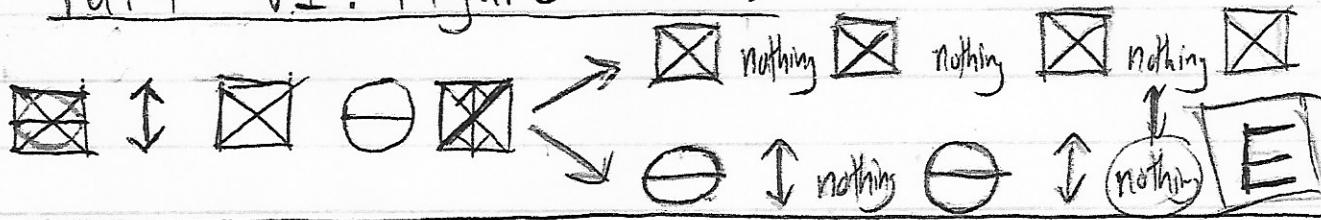
D 39) 

D 40) 

Part VI: Figure Series

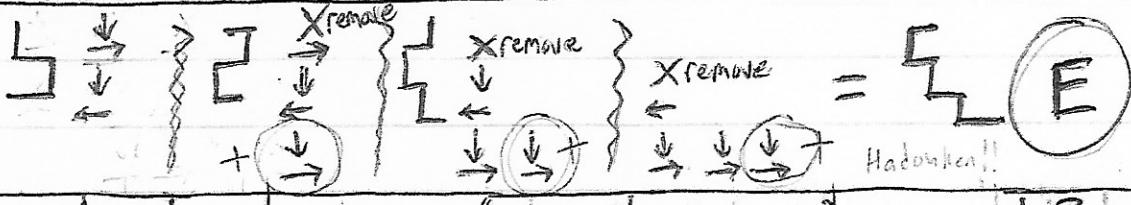
E

41)



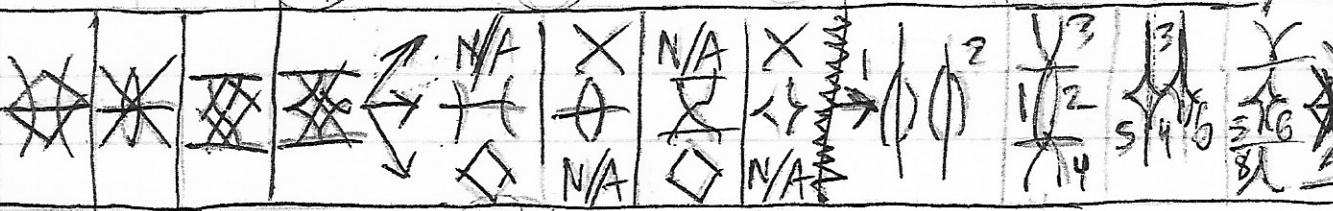
E

42)



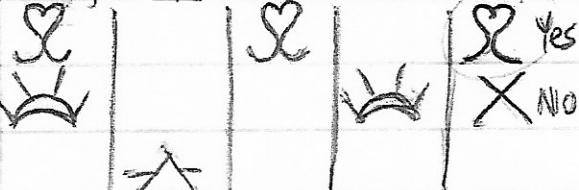
C

43)



A

44.)

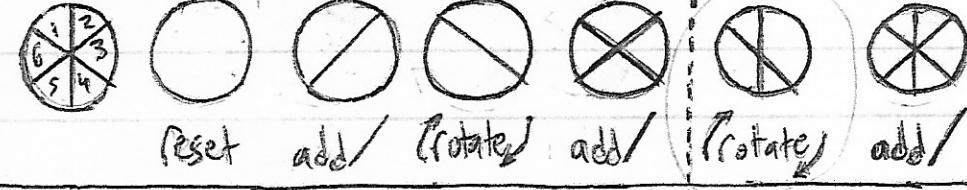


A

B wrong. Incomplete shape
C wrong. wouldn't repeat yet
D complicates model. A better fit
E wrong. clearly heart will be here

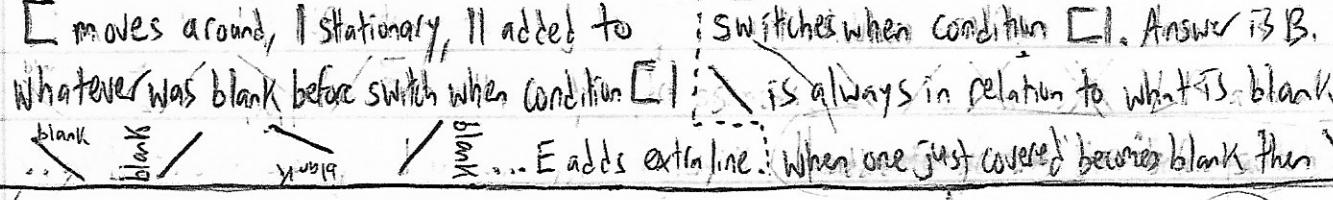
A

45)



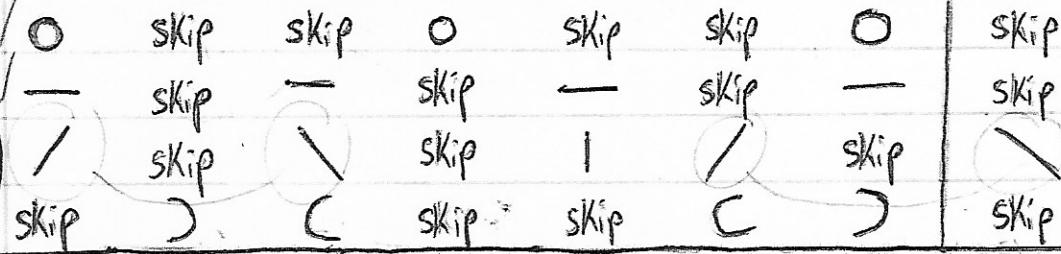
B

46)



C

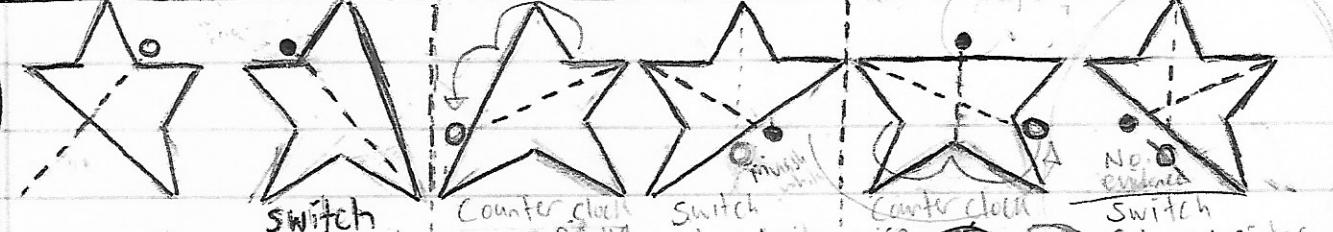
47.)



C

D

48.)



No evidence
Switch
Colors + sides

White means
switch
blank means
switch

White means
on the left
switch
only the left

no evidence to
suggest blank effect
only the left

D

Part VII: Problem Solving.

E

$$P(PQ) + P(PS) \text{ overlap: } n/a, O, I, \textcircled{1} \downarrow$$

No vertical line available for S in PS, thus P has to be $\textcircled{1}$. It follows S = $\textcircled{-}$, and R = $\textcircled{0}$

$$Q(QT) + Q(PQ) \text{ overlap: } n/a, O, I, \textcircled{0} \downarrow$$

No available Sq. reflects this for PR. E

$$S(RS) + S(PS) \text{ overlap: } n/a, O, I, \textcircled{0} \oplus \textcircled{S}$$

\textcircled{S} different from S regardless of rotation... mirror matters

D 60

$$(6 \text{ Full Hex 4. } \leftarrow 6 \text{ total (various rotations)})$$

$$(4 \text{ auto counts to 5, no mirror.})$$

$$(2 \text{ Full Hex 1 } \textcircled{1} + \text{mirror (not symm)})$$

$$(2 \text{ Full Hex 3. } \leftarrow 6 \text{ up only alt to FH4, +1 mirror})$$

$$(6 \text{ Full Hex 1 alt } \textcircled{1} \text{ no mirror (yes symm)})$$

$$50) (2 \text{ Full Hex 2. } \leftarrow 6 \text{ AND } \leftarrow 6 \text{ mirror } \leftarrow 6 \text{ AND } \leftarrow 6 \text{ mirror })$$

$$(\textcircled{1} \text{ can't do. So.. } 6+12+24+12+6=60)$$

IN
VS
SN

30+
Chairman
+5 optional

Josh • Jacob	16/10	Jeff • Jim	16/10	Jared • Jeff	16/10	Julian • Jen	16/10	Jane • Jen	16/10
Greg • Xan	12/10	Greg • Xan	11/11	Bob • Dan	11/11	Karen • Ethan	11/11	Sarah • Jen	11/11
Wolf • Dor	13/11	OR		Tim • Tom	13/11	Tim • Tom	12/11	Marc • Alan	12/11
• Kram • Elan	14/11			• Gato • Alan	14/11	• Flash • Super	14/11	• Flash • Super	13/11
• Susie • LUC	15/11			• Hank • Date	15/11	• Bat • Azrael	15/11	• Batman • Date	15/11

Josh • Jacob	21/10	Jeff • Jim	21/11	Jane • Jen	21/11	Julian • Jen	21/11	Jane • Jen	21/11
• Greg • Xan	21/11			• Karen • Ethan	21/11			• Sarah • Jen	21/11
• Wolf • Dor	22/11	OR		• Tim • Tom	22/11	OR		• Marc • Alan	22/11
• Kram • Elan	23/11			• Gato • Alan	23/11	• Flash • Super	23/11	• Batman • Date	23/11
• Susie • LUC	24/11			• Hank • Date	24/11	• Bat • Azrael	24/11	• Adam • Alfred	24/11

E 51.

rd 2 start:	0 0 4 0	rd 3 start:	0 2 2 0	rd 5 start:	2 1 1 0
rd 2 end:	0 1 3 0	rd 3 end:	1 1 1 0	rd 5 end:	1 1 1 1
rd 2 start:	0 1 3 0	rd 4 start:	1 1 1 0	rd 5 end:	1 1 1 1
rd 2 end:	0 2 2 0	rd 4 end:	2 1 1 0		

rd 2 start:	0 0 4 0	rd 3 start:	0 2 2 0	rd 5 start:	2 1 1 0
rd 2 end:	0 1 3 0	rd 3 end:	1 1 1 0	rd 5 end:	1 1 1 1
rd 2 start:	0 1 3 0	rd 4 start:	1 1 1 0	rd 5 end:	1 1 1 1
rd 2 end:	0 2 2 0	rd 4 end:	2 1 1 0		

C 52.) Doesn't know has 2 yet. Doesn't know has 2 yet.

In other scenarios where cards more evenly distributed, it takes less time. More player w/4 takes the longest

53.)

30 but no 5 piaster coin

$$\rightarrow 75 - 69 = 6 \checkmark$$

$$C) 1 \rightarrow 3 \rightarrow 2 \rightarrow 6 \rightarrow 12 \rightarrow 30 \rightarrow 75 \rightarrow 150 \rightarrow 300 \text{ (eight)}$$

$$54.) 1 \rightarrow 2 \rightarrow 5 \dots \times \text{ can't satisfy 69 rule // ... + no way to 69 rule w/out 30.}$$

Not same as Monty Hall!

Spin after first shot? Because won't switch after first, now treat 2 shots as 1 iteration

Yes: 2 bullets / 6 chambers = 33.34%.

Spin after loading first bullet? No

B 55.) No: 2 bullets / 5 chambers = 40.0%.

Yes: loaded vs empty

Went with most complex scenario first

Standard loading assumed

C 56.) 2.5 gal container w/ 1.5 gal (5+12) + 2.5 weight vs. 1 gal container full (5+8) + 6.5 weight

Dips left: Either 2.5 too heavy

Balances: Nothing wrong w/ either

Dips Right: Either 6.5 too heavy

or 6.5 too light (Plus 1.5, 4.5 ok)

2.5 or 6.5. Must be 1.5 or 4.5

or 2.5 too light (Plus 1.5, 4.5 ok)

2nd Weighing: 1.5 + 5(empty) vs 6.5

2nd Weighing: 1.5 + 5(empty) vs 6.5

Either 6.5 too light OR balances, will know 1.5 light or heavy (OR 4.5 balances).

Either 6.5 too heavy OR balances,

and we therefore know 2.5 too heavy

Third: If 1.5 + 5 = 6.5 balance, and we therefore know 2.5 too light

it's hard to determine 4.5's direction. Depends if error ≥ 5 ... closest is $(1.5 + 2.5) \sim 4.5 < 5$