

Answers-ALPHA

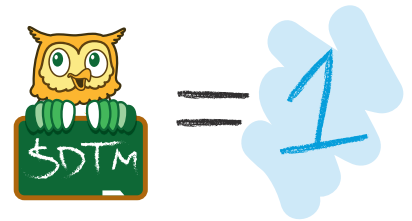
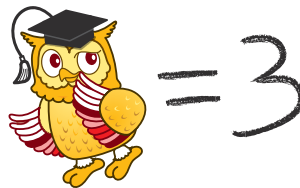


Day 1

Problem 1

3 points

correct answer: 1



Problem 2

3 points

correct answer: 56

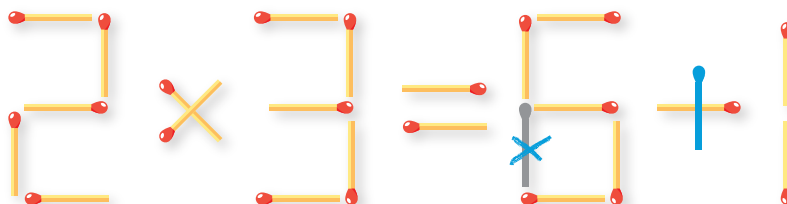
4	4	1	3	2
3	1	3	2	4
2	2	4	1	3
1	3	2	4	1
	A	B	C	D

$$(4A+4D+3C) \cdot (1B+1C-2D+3B+4B) = (4+2+2) \cdot (2+4-3+3+1) = 8 \cdot 7 = 56$$

Problem 3

4 points

correct answer: $2*3=5+1$

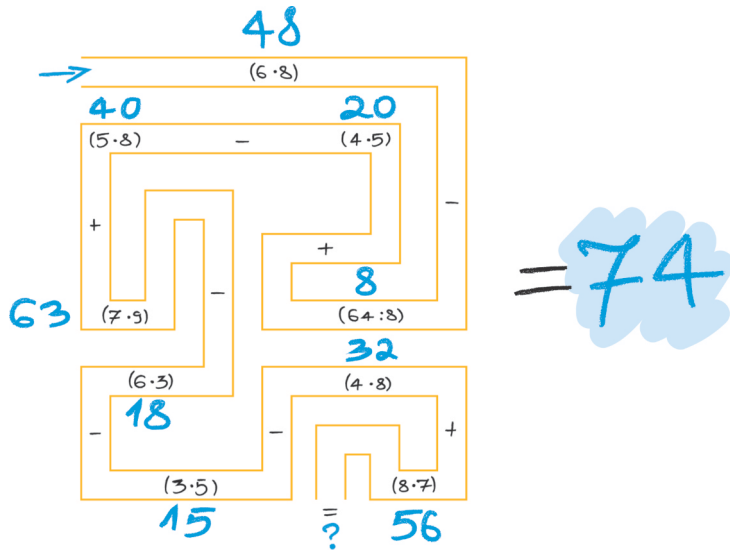


$$2*3=5+1$$

Problem 4

4 points

correct answer: 74



Problem 5

5 points

correct answer: 8

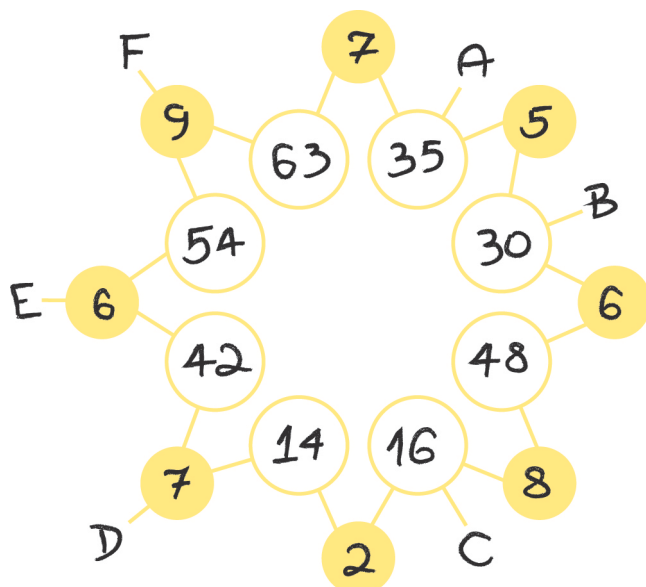
•	8	3	5	7
4	32	12	20	28
7	56	21	35	49
2	16	6	10	14
9	72	27	45	63

8

Problem 6

5 points

correct answer: 353016769



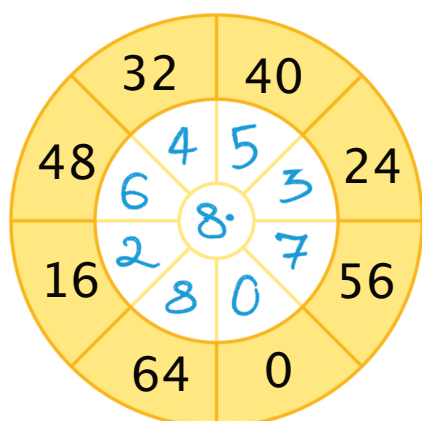
ABCDEF = 353016769



Problem 1

3 points

correct answer: 2121413010



No. of digits

0	1	2	3	4	5	6	7	8	9
2	1	2	1	4	1	3	0	1	0

Code:

Problem 2

3 points

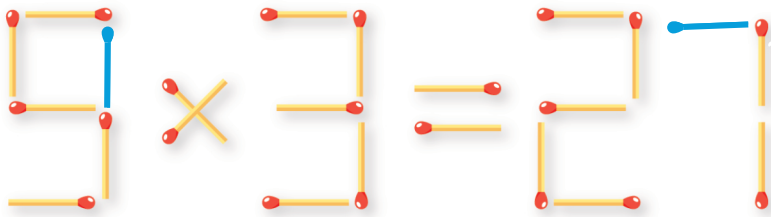
correct answer: 9711

$$\begin{aligned} \star 9 \cdot 8 &= 72 \\ (\odot 7 + 5) \cdot 7 &= 84 \\ 6 \cdot (\square 11 - 5) &= 36 \\ \star \odot \square &= 9711 \end{aligned}$$

Problem 3

4 points

correct answer: $9 \cdot 3 = 27$



Problem 4

4 points

correct answer: 30

4	4	2	1	3
3	3	1	4	2
2	2	4	3	1
1	1	3	2	4
	A	B	C	D

$$(2A+3C-2D) \cdot (1C+3B-3A+4D+1B) =$$

$$=(2+4-1) \cdot (2+1-3+3+3)=30$$

Problem 5

5 points

correct answer: 7

•	8	6	7	4
6	48	36	42	24
5	40	30	35	20
9	72	54	63	36
3	24	18	21	12

Problem 6

5 points

correct answer: 636442361849122125

A	B	C	D	E	F	G	H	I
63	64	42	36	18	49	12	21	25



Problem 1

3 points

correct answer: 8

•	3	7	6	9	2
9	27	63	54	81	18
4	12	28	24	36	8
2	6	14	12	18	4
5	15	35	30	45	10
6	18	42	36	54	12

Problem 2

3 points

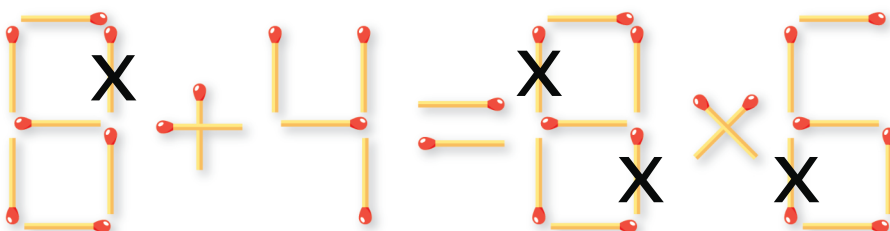
correct answer: 12

3	•	2	9
2	6	12	54
1	5	10	45
	A	B	C

Problem 3

4 points

correct answer: $6+4=2*5$



Problem 4

4 points

correct answer: 70

5	2	4	1	5	3
4	3	5	4	2	1
3	5	2	3	1	4
2	4	1	5	3	2
1	1	3	2	4	5
	A	B	C	D	E

$$(5A+5B+2A-2B+2C) \cdot (5C+5E+1A) =$$

$$=(2+4+4-1+5) \cdot (1+3+1)=70$$

Problem 5

5 points

correct answer: 14

 = 7
  = 2
  = 5

 +
  +
  = 14

Problem 6

5 points

correct answer: 75080349

	56		27	
36	X	4	9	3
	8	X	3	2
35	7	5	X	1
	A	B	C	

A1	B1	C1	A2	B2	C2	A3	B3	C3
7	5	0	8	0	3	0	4	9