



MATHDICE[®]

BLACKOUT

SET A ADVANCED

**Thank you for participating in our
Math Dice Classroom Program!**

We hope you enjoy this week's paper and pencil game.

This packet includes:

- **How to Play Instructions**
- **6 Challenges**
- **Solution Sheet**

To learn more about our Math Dice Classroom Program, contact

**Alana Ripy via email: education@thinkfun.com
or call 703-549-4999 ext 3605.**



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How To Play

Your Goal:

Find all possible solutions for hitting the Target Numbers with your Scoring Rolls.

Targets: 6, 7, 12, 19, 23, 40

Roll 1: 2, 5, 6

Roll 2: 3, 4, 5

Equation 1: $(4 + 5) - 3 = 6$

Equation 2: $5 \times (2 + 6) = 40$

To Play:

Using Math Dice rules, try to hit the Target Numbers with Scoring Rolls 1 and 2. To “hit” a Target, use all three Scoring Numbers to create a math expression that equals the Target Number.

Begin with Roll 1 and try to hit each of the Targets. Record solutions for any targets that you are able to hit. Next, try to hit each target with Roll 2.

You will find that some Targets can be hit with Roll 1 Numbers only, some with Roll 2 Numbers only and some can be hit with both Rolls 1 and 2.

Tally all solves from both Rolls and record your “Total Solved” answer to the challenge.

Roll 1: 2 4 6			Targets Solved:		Roll 2: 1 2 6		
Target	Your Equation	Check Solved	Roll 1 # Solved		Target	Your Equation	Check Solved
6		<input type="checkbox"/>	3		6	$(4 + 5) - 3 = 6$	<input checked="" type="checkbox"/>
7	$(2 \times 6) - 5 = 7$	<input checked="" type="checkbox"/>	Roll 2 # Solved	5	7	$(3 \times 4) - 5 = 7$	<input checked="" type="checkbox"/>
12		<input type="checkbox"/>	Total Solved	8	12	$(3 \times 4) + 5 = 12$	<input checked="" type="checkbox"/>
19	$5^{\wedge} - 6 = 19$	<input checked="" type="checkbox"/>	Correct Answer Earns 5 pts	<input checked="" type="checkbox"/>	19	$(3 \times 5) + 4 = 19$	<input checked="" type="checkbox"/>
23		<input type="checkbox"/>	(Check box & add to Score Sheet)		23	$(4 \times 5) + 3 = 23$	<input checked="" type="checkbox"/>
40	$5 \times (2 + 6) = 40$	<input checked="" type="checkbox"/>			40		<input type="checkbox"/>

*I solved 3 from Roll 1 and 5 from Roll 2.
So 8 solved total.*





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6 TARGET BOARD

Connect Rolls to Targets to Earn the Most Points

#01 SET A

Allowed Operators
+ - * / ^

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Targets

2 5 6

Roll 1

3

5

7

18

20

28

Roll 2

4 5 6

Roll 1: 2 5 6

Targets Solved:

Roll 2: 4 5 6

Target	Your Equation	Check Solved
3		<input type="checkbox"/>
5		<input type="checkbox"/>
7		<input type="checkbox"/>
18		<input type="checkbox"/>
20		<input type="checkbox"/>
28		<input type="checkbox"/>

Roll 1 # Solved	
Roll 2 # Solved	
Total Solved	
Correct Answer Earns 5 pts (Check box & add to Score Sheet)	<input type="checkbox"/>

Target	Your Equation	Check Solved
3		<input type="checkbox"/>
5		<input type="checkbox"/>
7		<input type="checkbox"/>
18		<input type="checkbox"/>
20		<input type="checkbox"/>
28		<input type="checkbox"/>

#02 SET A

Allowed Operators
+ - * / ^

ADVANCED

Targets

4 5 6

Roll 1

2

3

11

19

24

32

Roll 2

2 3 6

Roll 1: 4 5 6

Targets Solved:

Roll 2: 2 3 6

Target	Your Equation	Check Solved
2		<input type="checkbox"/>
3		<input type="checkbox"/>
11		<input type="checkbox"/>
19		<input type="checkbox"/>
24		<input type="checkbox"/>
32		<input type="checkbox"/>

Roll 1 # Solved	
Roll 2 # Solved	
Total Solved	
Correct Answer Earns 5 pts (Check box & add to Score Sheet)	<input type="checkbox"/>

Target	Your Equation	Check Solved
2		<input type="checkbox"/>
3		<input type="checkbox"/>
11		<input type="checkbox"/>
19		<input type="checkbox"/>
24		<input type="checkbox"/>
32		<input type="checkbox"/>

Name

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6 TARGET BOARD

Connect Rolls to Targets to Earn the Most Points

#03 SET A

Allowed Operators
+ - * / ^

ADVANCED

Targets

2 5 6

Roll 1

4

12

15

17

26

38

3 5 6

Roll 2

Roll 1: 2 5 6

Targets Solved:

Roll 2: 3 5 6

Target	Your Equation	Check Solved
4		<input type="checkbox"/>
12		<input type="checkbox"/>
15		<input type="checkbox"/>
17		<input type="checkbox"/>
26		<input type="checkbox"/>
38		<input type="checkbox"/>

Roll 1 # Solved	
Roll 2 # Solved	
Total Solved	
Correct Answer Earns 5 pts (Check box & add to Score Sheet)	<input type="checkbox"/>

Target	Your Equation	Check Solved
4		<input type="checkbox"/>
12		<input type="checkbox"/>
15		<input type="checkbox"/>
17		<input type="checkbox"/>
26		<input type="checkbox"/>
38		<input type="checkbox"/>

#04 SET A

Allowed Operators
+ - * / ^

ADVANCED

Targets

3 5 6

Roll 1

2

6

8

10

12

22

2 3 5

Roll 2

Roll 1: 3 5 6

Targets Solved:

Roll 2: 2 3 5

Target	Your Equation	Check Solved
2		<input type="checkbox"/>
6		<input type="checkbox"/>
8		<input type="checkbox"/>
10		<input type="checkbox"/>
12		<input type="checkbox"/>
22		<input type="checkbox"/>

Roll 1 # Solved	
Roll 2 # Solved	
Total Solved	
Correct Answer Earns 5 pts (Check box & add to Score Sheet)	<input type="checkbox"/>

Target	Your Equation	Check Solved
2		<input type="checkbox"/>
6		<input type="checkbox"/>
8		<input type="checkbox"/>
10		<input type="checkbox"/>
12		<input type="checkbox"/>
22		<input type="checkbox"/>

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6 TARGET BOARD

Connect Rolls to Targets to Earn the Most Points

#05 SET A

Allowed Operators
+ - * / ^

ADVANCED

Targets

4 5 6

Roll 1

10

13

14

19

25

32

3 5 6

Roll 2

Roll 1: 4 5 6

Targets Solved:

Roll 2: 3 5 6

Target	Your Equation	Check Solved
10		<input type="checkbox"/>
13		<input type="checkbox"/>
14		<input type="checkbox"/>
19		<input type="checkbox"/>
25		<input type="checkbox"/>
32		<input type="checkbox"/>

Roll 1 # Solved	
Roll 2 # Solved	
Total Solved	
Correct Answer Earns 5 pts (Check box & add to Score Sheet)	<input type="checkbox"/>

Target	Your Equation	Check Solved
10		<input type="checkbox"/>
13		<input type="checkbox"/>
14		<input type="checkbox"/>
19		<input type="checkbox"/>
25		<input type="checkbox"/>
32		<input type="checkbox"/>

#06 SET A

Allowed Operators
+ - * / ^

ADVANCED

Targets

2 3 5

Roll 1

6

16

20

32

38

40

2 5 6

Roll 2

Roll 1: 2 3 5

Targets Solved:

Roll 2: 2 5 6

Target	Your Equation	Check Solved
6		<input type="checkbox"/>
16		<input type="checkbox"/>
20		<input type="checkbox"/>
32		<input type="checkbox"/>
38		<input type="checkbox"/>
40		<input type="checkbox"/>

Roll 1 # Solved	
Roll 2 # Solved	
Total Solved	
Correct Answer Earns 5 pts (Check box & add to Score Sheet)	<input type="checkbox"/>

Target	Your Equation	Check Solved
6		<input type="checkbox"/>
16		<input type="checkbox"/>
20		<input type="checkbox"/>
32		<input type="checkbox"/>
38		<input type="checkbox"/>
40		<input type="checkbox"/>

Name

Class



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BLACKOUT 6 TARGET Solutions ADVANCED: SET A

1

Roll 1: 2 5 6		Targets Solved:		Roll 2: 4 5 6	
Target	Solution			Target	Solution
3	$(6 + 2) - 5$	Roll 1 # Solved	5	3	$(5 + 4) - 6$
5		Roll 2 # Solved	3	5	$(6 + 4) - 5$
7	$(6 * 2) - 5$	Total Solved	8	7	$(6 + 5) - 4$
18	$6 * (5 - 2)$			18	
20	$5 * (6 - 2)$	Correct Answer Earns 5 pts (Add to Score Sheet)		20	
28	$(6 * 5) - 2$			28	

2

Roll 1: 4 5 6		Targets Solved:		Roll 2: 2 3 6	
Target	Solution			Target	Solution
2	$(6 + 4) / 5$	Roll 1 # Solved	4	2	$(2 ^ 3) - 6$
3	$(5 + 4) - 6$	Roll 2 # Solved	4	3	$(3 ^ 2) - 6$
11		Total Solved	8	11	$(6 + 3) + 2$
19	$(6 * 4) - 5$			19	
24		Correct Answer Earns 5 pts (Add to Score Sheet)		24	$3 * (6 + 2)$
32	$(6 - 4) ^ 5$			32	

3

Roll 1: 2 5 6		Targets Solved:		Roll 2: 3 5 6	
Target	Solution			Target	Solution
4	$(5 * 2) - 6$	Roll 1 # Solved	5	4	$(6 + 3) - 5$
12		Roll 2 # Solved	3	12	$6 * (5 - 3)$
15	$(6 * 5) / 2$	Total Solved	8	15	$5 * (6 - 3)$
17	$(6 * 2) + 5$			17	
26	$(2 ^ 5) - 6$	Correct Answer Earns 5 pts (Add to Score Sheet)		26	
38	$(2 ^ 5) + 6$			38	

4

Roll 1: 3 5 6		Targets Solved:		Roll 2: 2 3 5	
Target	Solution			Target	Solution
2	$(5 + 3) - 6$	Roll 1 # Solved	4	2	
6		Roll 2 # Solved	3	6	$(5 + 3) - 2$
8	$(6 + 5) - 3$	Total Solved	7	8	
10	$(6 * 5) / 3$			10	$(5 + 3) + 2$
12	$6 * (5 - 3)$	Correct Answer Earns 5 pts (Add to Score Sheet)		12	
22				22	$(5 ^ 2) - 3$

5

Roll 1: 4 5 6		Targets Solved:		Roll 2: 3 5 6	
Target	Solution			Target	Solution
10	$5 * (6 - 4)$	Roll 1 # Solved	5	10	$(6 * 5) / 3$
13		Roll 2 # Solved	5	13	$(6 * 3) - 5$
14	$(5 * 4) - 6$	Total Solved	10	14	$(6 + 5) + 3$
19	$(6 * 4) - 5$			19	
25	$5 ^ (6 - 4)$	Correct Answer Earns 5 pts (Add to Score Sheet)		25	$5 ^ (6 / 3)$
32	$(6 - 4) ^ 5$			32	$(6 / 3) ^ 5$

6

Roll 1: 2 3 5		Targets Solved:		Roll 2: 2 5 6	
Target	Solution			Target	Solution
6	$(5 + 3) - 2$	Roll 1 # Solved	3	6	
16	$2 * (5 + 3)$	Roll 2 # Solved	5	16	$(5 * 2) + 6$
20		Total Solved	8	20	$5 * (6 - 2)$
32				32	$(6 * 5) + 2$
38		Correct Answer Earns 5 pts (Add to Score Sheet)		38	$(2 ^ 5) + 6$
40	$5 * (2 ^ 3)$			40	$5 * (6 + 2)$

