



# MATHDICE<sup>®</sup>

## BOWLING

### SET B 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**

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## BOWLING

### How To Play

#### Your Goal:

Identify the number of Target Pins that CAN'T BE HIT by either of the Scoring Balls.

#### To Play:

Using Math Dice rules, hit as many of the Target Pins as you can. To "hit" a Target Pin, use all three Scoring Numbers to create a math expression that equals the Target Number.

Some of the pins can be hit by one Scoring Ball, others can be hit by the other Scoring Ball and some can't be hit by either ball.

Working with one Target Pin at a time, try to find an equation first with one ball and then the next. Write all of your solutions on your worksheet.

When you are finished, count the number of Target Pins you CAN'T HIT and record your "Total that CAN'T BE SOLVED" answer in the lower right corner box.

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

Target Pins

Scoring Numbers

Ball 1: 2 4 5      Ball 2: 4 5 6

Target Pins	Target Pin #	Your Equation	Can't Be Hit
<del>12</del>	12	$4 \times (5 - 2) = 12$	<input type="checkbox"/>
20	20		<input checked="" type="checkbox"/>
<del>22</del>	22	$(4 \times 5) + 2 = 22$	<input type="checkbox"/>
<del>34</del>	34	$(5 \times 6) + 4 = 34$	<input type="checkbox"/>
38	38		<input checked="" type="checkbox"/>
<del>40</del>	40	$(2 \times 4) \times 5 = 40$	<input type="checkbox"/>

How many Targets cannot be hit? **2**

Correct answer earns 5 pts (Check box & add to Score Sheet)

*I think 20 and 38 can't be hit!*



Use the Scoring Number Balls to hit the Targets. How many pins can't be hit?

## #01 SET B

Allowed Operators  
+ - \* / ^

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**Target Pins**

**Scoring Numbers**

Target Pin #	Your Equation	Can't Be Hit
7	_____	<input type="checkbox"/>
11	_____	<input type="checkbox"/>
15	_____	<input type="checkbox"/>
17	_____	<input type="checkbox"/>
21	_____	<input type="checkbox"/>
25	_____	<input type="checkbox"/>

How many Targets cannot be hit?

Correct answer earns 5 pts (Check box & add to Score Sheet)

## #02 SET B

Allowed Operators  
+ - \* / ^

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**Target Pins**

**Scoring Numbers**

Target Pin #	Your Equation	Can't Be Hit
6	_____	<input type="checkbox"/>
18	_____	<input type="checkbox"/>
20	_____	<input type="checkbox"/>
24	_____	<input type="checkbox"/>
25	_____	<input type="checkbox"/>
40	_____	<input type="checkbox"/>

How many Targets cannot be hit?

Correct answer earns 5 pts (Check box & add to Score Sheet)

Name

Class



Use the Scoring Number Balls to hit the Targets. How many pins can't be hit?

## #03 SET B

Allowed Operators  
+ - \* / ^

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**Target Pins**

**Scoring Numbers**

Target Pin #	Your Equation	Can't Be Hit
5	_____	<input type="checkbox"/>
9	_____	<input type="checkbox"/>
20	_____	<input type="checkbox"/>
21	_____	<input type="checkbox"/>
38	_____	<input type="checkbox"/>
39	_____	<input type="checkbox"/>

How many Targets cannot be hit?

Correct answer earns 5 pts (Check box & add to Score Sheet)

## #04 SET B

Allowed Operators  
+ - \* / ^

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**Target Pins**

**Scoring Numbers**

Target Pin #	Your Equation	Can't Be Hit
12	_____	<input type="checkbox"/>
15	_____	<input type="checkbox"/>
21	_____	<input type="checkbox"/>
25	_____	<input type="checkbox"/>
27	_____	<input type="checkbox"/>
38	_____	<input type="checkbox"/>

How many Targets cannot be hit?

Correct answer earns 5 pts (Check box & add to Score Sheet)

Name

Class



Use the Scoring Number Balls to hit the Targets. How many pins can't be hit?

## #05 SET B

Allowed Operators  
+ - \* / ^

ADVANCED

**Target Pins**

**Scoring Numbers**

Ball 1: 2 3 5  
Ball 2: 2 5 6

Target Pin #	Your Equation	Can't Be Hit
15	_____	<input type="checkbox"/>
18	_____	<input type="checkbox"/>
21	_____	<input type="checkbox"/>
24	_____	<input type="checkbox"/>
25	_____	<input type="checkbox"/>
36	_____	<input type="checkbox"/>

How many Targets cannot be hit?

Correct answer earns 5 pts (Check box & add to Score Sheet)

## #06 SET B

Allowed Operators  
+ - \* / ^

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**Target Pins**

**Scoring Numbers**

Ball 1: 2 4 6  
Ball 2: 3 5 6

Target Pin #	Your Equation	Can't Be Hit
5	_____	<input type="checkbox"/>
11	_____	<input type="checkbox"/>
15	_____	<input type="checkbox"/>
19	_____	<input type="checkbox"/>
23	_____	<input type="checkbox"/>
30	_____	<input type="checkbox"/>

How many Targets cannot be hit?

Correct answer earns 5 pts (Check box & add to Score Sheet)

Name

Class



## ADVANCED: SET B

**01**

Roll #1: 2,3,4

Roll #2: 3,5,6

Target	Roll#	Solution
7	2	$(6 / 3) + 5$
11	1	$(4 * 2) + 3$
15	2	$5 * (6 - 3)$
17	X	Cannot be hit
21	2	$(5 * 3) + 6$
25	2	$5 ^ (6 / 3)$

Pins not hit: 1

**02**

Roll #1: 2,5,6

Roll #2: 3,5,6

Target	Roll#	Solution
6	X	Cannot be hit
18	1	$6 * (5 - 2)$
20	1	$5 * (6 - 2)$
24	X	Cannot be hit
25	2	$5 ^ (6 / 3)$
40	1	$5 * (6 + 2)$

Pins not hit: 2

**03**

Roll #1: 4,5,6

Roll #2: 2,5,6

Target	Roll#	Solution
5	1	$(6 + 4) - 5$
9	2	$(6 + 5) - 2$
20	2	$5 * (6 - 2)$
21	X	Cannot be hit
38	2	$(2 ^ 5) + 6$
39	X	Cannot be hit

Pins not hit: 2

**04**

Roll #1: 4,5,6

Roll #2: 3,4,5

Target	Roll#	Solution
12	2	$(5 + 4) + 3$
15	1	$(6 + 5) + 4$
21	X	Cannot be hit
25	1	$5 ^ (6 - 4)$
27	2	$3 * (5 + 4)$
38	X	Cannot be hit

Pins not hit: 2

**05**

Roll #1: 2,3,5

Roll #2: 2,5,6

Target	Roll#	Solution
15	2	$(6 * 5) / 2$
18	2	$6 * (5 - 2)$
21	1	$3 * (5 + 2)$
24	X	Cannot be hit
25	1	$5 * (3 + 2)$
36	X	Cannot be hit

Pins not hit: 2

**06**

Roll #1: 2,4,6

Roll #2: 3,5,6

Target	Roll#	Solution
5	1	$(6 + 4) / 2$
11	X	Cannot be hit
15	2	$5 * (6 - 3)$
19	X	Cannot be hit
23	2	$(6 * 3) + 5$
30	X	Cannot be hit

Pins not hit: 3