



The Grandstand Sabotage

Grade 10 math · Addition, Multiplication, Rounding, Place value, Division · Reading level grades 7-9

Detective: _____ Date: _____

Someone tampered with the championship game equipment at Diamond City Stadium. The head groundskeeper needs your analytical skills to decode clues, eliminate suspects, and save the pennant race.

1. Solve each math problem. The answer is a number, and the letter beside it is what that number stands for.
2. In the clue boxes, write that letter in every box showing the same number, then read the secret clue.
3. Use each clue to cross suspects off the list. The one suspect left at the end is the culprit!

My answer: the stadium saboteur is _____

Possible suspects

Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	PITCHING STYLE	LUCKY CHARM	BATTING STANCE	CAP STYLE	PITCHING FLAW
Ken Griffey	Sweeping Slider	Vintage Catchers Mask	Left Handed Batter	Flat Brim Green Cap	Slow Pop Times
Willie Mays	Sinking Changeup	Vintage Catchers Mask	Right Handed Batter	Fitted Navy Cap	Wild Pickoff Throws
Justin Verlander	Sinking Changeup	Pine Tar Glove	Left Handed Batter	Backward Red Cap	Slow Pop Times
Aaron Judge	100mph Heat	Autographed Wristband	Left Handed Batter	Backward Red Cap	Slow Pop Times
Roberto Clemente	Sinking Changeup	Custom Cleats	Left Handed Batter	Backward Red Cap	Tipping Curveballs
Mickey Vance	Sinking Changeup	Autographed Wristband	Left Handed Batter	Flat Brim Green Cap	Slow Pop Times
Jackie Cobb	100mph Heat	Autographed Wristband	Right Handed Batter	Fitted Navy Cap	Tipping Curveballs
Bryce Harper	100mph Heat	Autographed Wristband	Right Handed Batter	Fitted Navy Cap	Slow Pop Times
Mike Trout	Sinking Changeup	Gold Bat Chain	Left Handed Batter	Fitted Navy Cap	Slow Pop Times
Clayton Kershaw	100mph Heat	Gold Bat Chain	Right Handed Batter	Flat Brim Green Cap	Slow Pop Times
Shohei Ohtani	Knuckleball	Pine Tar Glove	Left Handed Batter	Fitted Navy Cap	Slow Pop Times
Hank Gibson	Sinking Changeup	Gold Bat Chain	Left Handed Batter	Fitted Navy Cap	Tipping Curveballs
Ted Williams	Sweeping Slider	Vintage Catchers Mask	Right Handed Batter	Backward Red Cap	Tipping Curveballs
Nolan Ryan	Sweeping Slider	Pine Tar Glove	Left Handed Batter	Backward Red Cap	Wild Pickoff Throws
Sandy Koufax	Knuckleball	Custom Cleats	Left Handed Batter	Fitted Navy Cap	Slow Pop Times
Mookie Betts	Knuckleball	Pine Tar Glove	Right Handed Batter	Flat Brim Green Cap	Slow Pop Times
Ernie Banks	100mph Heat	Gold Bat Chain	Left Handed Batter	Backward Red Cap	Tipping Curveballs
Freddie Freeman	100mph Heat	Vintage Catchers Mask	Left Handed Batter	Flat Brim Green Cap	Slow Pop Times
Pedro Martinez	100mph Heat	Vintage Catchers Mask	Left Handed Batter	Fitted Navy Cap	Slow Pop Times
Ozzie Smith	Sweeping Slider	Gold Bat Chain	Right Handed Batter	Fitted Navy Cap	Slow Pop Times
Cal Rivera	Sinking Changeup	Vintage Catchers Mask	Left Handed Batter	Fitted Navy Cap	Slow Pop Times

CLUE 1 Addition

The groundskeeper added up the stolen baseballs in the storage room to reveal the first letter code.

Solve each problem, then write its letter in every clue box that shows the same number.

T						T									T	
8153	7628	3174	6369	2258	3369	4061	8153	3174	9615	2198	4810	7975	4810	4955	4061	8153

				T						T				
9615	6369	3174	5596	9615	6369	8153	4061	4988	5596	4204	3174	2258	8153	6369

$4670 + 3483 = \square \rightarrow \text{T}$	$1733 + 1636 = \square \rightarrow \text{B}$	$1424 + 834 = \square \rightarrow \text{A}$
$3476 + 4499 = \square \rightarrow \text{I}$	$1398 + 1776 = \square \rightarrow \text{E}$	$3883 + 3745 = \square \rightarrow \text{H}$
$2189 + 2015 = \square \rightarrow \text{L}$	$1776 + 3212 = \square \rightarrow \text{M}$	$1234 + 964 = \square \rightarrow \text{R}$
$6148 + 3467 = \square \rightarrow \text{U}$	$4119 + 2250 = \square \rightarrow \text{S}$	$2307 + 1754 = \square \rightarrow \text{O}$
$2948 + 1862 = \square \rightarrow \text{D}$	$2251 + 2704 = \square \rightarrow \text{N}$	$1937 + 3659 = \square \rightarrow \text{C}$

Scratch space:

CLUE 2
Multiplication facts (1-12)

By calculating the total stadium seats arranged in equal rows, you reveal the next code.

Solve each problem, then write its letter in every clue box that shows the same number.

W									W					
96	88	81	44	16	27	27	27	64	96	64	12	16	144	81

120	64	44	1	16	1	50	64	81	81	16	60	44	16	64	60	81	120	16

1	30	9	70	30	81

$12 \times 8 = \square \rightarrow \text{W}$

$5 \times 12 = \square \rightarrow \text{R}$

$9 \times 9 = \square \rightarrow \text{T}$

$6 \times 5 = \square \rightarrow \text{U}$

$11 \times 8 = \square \rightarrow \text{I}$

$4 \times 11 = \square \rightarrow \text{N}$

$9 \times 3 = \square \rightarrow \text{S}$

$8 \times 8 = \square \rightarrow \text{A}$

$4 \times 4 = \square \rightarrow \text{E}$

$1 \times 9 = \square \rightarrow \text{G}$

$10 \times 12 = \square \rightarrow \text{H}$

$12 \times 12 = \square \rightarrow \text{F}$

$6 \times 2 = \square \rightarrow \text{L}$

$10 \times 5 = \square \rightarrow \text{B}$

$1 \times 1 = \square \rightarrow \text{D}$

$7 \times 10 = \square \rightarrow \text{O}$

Scratch space:

Rounding

The radar gun display rounds pitch speeds to the nearest ten to generate a digital clue.

Solve each problem, then write its letter in every clue box that shows the same number.

Diagram showing the distribution of 10000 people across 1000 houses. The houses are arranged in two rows. The top row has 10 houses, and the bottom row has 10 houses. The first house in the top row is highlighted in orange and contains the letter 'S'. The first house in the bottom row is highlighted in orange and contains the letter 'S'. The numbers below the houses represent the number of people in each house.

House	People	House	People	House	People	House	People	House	People	House	People	House	People	House	People	House	People	House	People																				
1	1100	2	90	3	370	4	170	5	230	6	1100	7	2000	8	370	9	230	10	700	11	90	12	3000	13	1300	14	1100	15	2900	16	370	17	50	18	110	19	370	20	110
21	230	22	700	23	70	24	3000	25	1100	26	370	27	2000	28	200	29	700	30	3000	31	2900	32	1300	33	230	34	50	35	370										

Round 1,103 to the nearest hundred $\rightarrow$ **S**

Round 657 to the nearest hundred $\rightarrow$

Round 174 to the nearest ten $\rightarrow$ **U**

Round 374 to the nearest ten $\rightarrow$ **0**

Round 2,869 to the nearest hundred $\rightarrow$ **L**

Round 193 to the nearest hundred $\rightarrow$ **F**

Round 232 to the nearest ten $\rightarrow$ **T**

Round 89 to the nearest ten $\rightarrow$ **C**

Round 1,343 to the nearest hundred $\rightarrow$ **D**

Round 2,213 to the nearest thousand $\rightarrow$ **N**

Round 46 to the nearest ten $\rightarrow$ **W**

Round 2,895 to the nearest thousand → **E**

Round 74 to the nearest ten $\rightarrow$ **M**

Round 107 to the nearest ten $\rightarrow$ **P**

Scratch space:

CLUE 4 Place value

Analyzing the numbers on the scoreboard reveals a secret code hidden in the tens place.

Solve each problem, then write its letter in every clue box that shows the same number.

T					T			T										
7000	800	60	3000	60	7000	60	200	7000	5000	900	60	700	400	30	70	3000	600	
		T	T															
700	5000	7000	7000	60	3000	70	600	900	500	200	600	4000	5000	70	200	600	2000	60

What is the value of the 7 in 27,923?

→

T

What is the value of the 9 in 62,956?

→

V

What is the value of the 2 in 33,264?

→

C

What is the value of the 3 in 23,557?

→

D

What is the value of the 2 in 312,705?

→

G

What is the value of the 3 in 19,537?

→

U

What is the value of the 4 in 94,303?

→

P

What is the value of the 4 in 99,492?

→

O

What is the value of the 6 in 477,672?

→

A

What is the value of the 7 in 81,870?

→

N

What is the value of the 7 in 42,756?

→

F

What is the value of the 8 in 69,834?

→

H

What is the value of the 6 in 31,260?

→

E

What is the value of the 5 in 49,578?

→

Y

What is the value of the 5 in 765,779?

→

I

Scratch space:

CLUE 5**Division facts (1-12) - the last clue**

Dividing the remaining bucket of practice balls equally among bullpen pitchers decodes the final location.

First solve each problem. Then find each answer in the numbered list below and cross that sentence out. One sentence will be left - that is exactly what the villain did!

Step 1 - solve these:

$45 \div 9 = \boxed{}$

$72 \div 8 = \boxed{}$

$2 \div 1 = \boxed{}$

$24 \div 4 = \boxed{}$

$132 \div 12 = \boxed{}$

$21 \div 3 = \boxed{}$

$12 \div 4 = \boxed{}$

$32 \div 4 = \boxed{}$

$16 \div 4 = \boxed{}$

$10 \div 10 = \boxed{}$

$36 \div 3 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain blazed a hundred mile heat pitch, then laced up custom cleats.
2. The villain blazed a hundred mile heat pitch, then strapped on a vintage catchers mask.
3. The villain snapped off a sweeping slider, then strapped on a vintage catchers mask.
4. The villain delivered a submarine fastball, then strapped on a vintage catchers mask.
5. The villain dropped in a sinking changeup, then strapped on a vintage catchers mask.
6. The villain threw a wild knuckleball, then laced up custom cleats.
7. The villain delivered a submarine fastball, then laced up custom cleats.
8. The villain dropped in a sinking changeup, then laced up custom cleats.
9. The villain dropped in a sinking changeup, then flashed a gold bat chain.
10. The villain threw a wild knuckleball, then adjusted a pine tar glove.
11. The villain dropped in a sinking changeup, then tightened an autographed wristband.
12. The villain threw a wild knuckleball, then tightened an autographed wristband.

Answer Key

The Grandstand Sabotage

Culprit: Shohei Ohtani

Knuckleball · Pine Tar Glove · Left Handed Batter · Fitted Navy Cap · Slow Pop Times

Trail: Start 21 → Clue 1 19 → Clue 2 12 → Clue 3 9 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SABOTEUR DID NOT USE CUSTOM CLEATS"

$4670 + 3483 = 8153$ (T) · $1733 + 1636 = 3369$ (B) · $1424 + 834 = 2258$ (A) · $3476 + 4499 = 7975$ (I) · $1398 + 1776 = 3174$ (E) · $3883 + 3745 = 7628$ (H) · $2189 + 2015 = 4204$ (L) · $1776 + 3212 = 4988$ (M) · $1234 + 964 = 2198$ (R) · $6148 + 3467 = 9615$ (U) · $4119 + 2250 = 6369$ (S) · $2307 + 1754 = 4061$ (O) · $2948 + 1862 = 4810$ (D) · $2251 + 2704 = 4955$ (N) · $1937 + 3659 = 5596$ (C)

Clue 2 (Multiplication facts (1-12)): "WITNESS SAW A LEFT HANDED BATTER NEAR THE DUGOUT"

$12 \times 8 = 96$ (W) · $5 \times 12 = 60$ (R) · $9 \times 9 = 81$ (T) · $6 \times 5 = 30$ (U) · $11 \times 8 = 88$ (I) · $4 \times 11 = 44$ (N) · $9 \times 3 = 27$ (S) · $8 \times 8 = 64$ (A) · $4 \times 4 = 16$ (E) · $1 \times 9 = 9$ (G) · $10 \times 12 = 120$ (H) · $12 \times 12 = 144$ (F) · $6 \times 2 = 12$ (L) · $10 \times 5 = 50$ (B) · $1 \times 1 = 1$ (D) · $7 \times 10 = 70$ (O)

Clue 3 (Rounding): "SCOUTS NOTICED SLOW POP TIMES ON FIELD TWO"

Round 1,103 to the nearest hundred = 1100 (S) · Round 657 to the nearest hundred = 700 (I) · Round 174 to the nearest ten = 170 (U) · Round 374 to the nearest ten = 370 (O) · Round 2,869 to the nearest hundred = 2900 (L) · Round 193 to the nearest hundred = 200 (F) · Round 232 to the nearest ten = 230 (T) · Round 89 to the nearest ten = 90 (C) · Round 1,343 to the nearest hundred = 1300 (D) · Round 2,213 to the nearest thousand = 2000 (N) · Round 46 to the nearest ten = 50 (W) · Round 2,895 to the nearest thousand = 3000 (E) · Round 74 to the nearest ten = 70 (M) · Round 107 to the nearest ten = 110 (P)

Clue 4 (Place value): "THE DETECTIVE FOUND A FITTED NAVY CAP IN CAGE"

What is the value of the 7 in 27,923? = 7000 (T) · What is the value of the 9 in 62,956? = 900 (V) · What is the value of the 2 in 33,264? = 200 (C) · What is the value of the 3 in 23,557? = 3000 (D) · What is the value of the 2 in 312,705? = 2000 (G) · What is the value of the 3 in 19,537? = 30 (U) · What is the value of the 4 in 94,303? = 4000 (P) · What is the value of the 4 in 99,492? = 400 (O) · What is the value of the 6 in 477,672? = 600 (A) · What is the value of the 7 in 81,870? = 70 (N) · What is the value of the 7 in 42,756? = 700 (F) · What is the value of the 8 in 69,834? = 800 (H) · What is the value of the 6 in 31,260? = 60 (E) · What is the value of the 5 in 49,578? = 500 (Y) · What is the value of the 5 in 765,779? = 5000 (I)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Shohei Ohtani

$45 \div 9 = 5$ · $72 \div 8 = 9$ · $2 \div 1 = 2$ · $24 \div 4 = 6$ · $132 \div 12 = 11$ · $21 \div 3 = 7$ · $12 \div 4 = 3$ · $32 \div 4 = 8$ · $16 \div 4 = 4$ · $10 \div 10 = 1$ · $36 \div 3 = 12$