



The Mystery of the Grand Diamond Sabotage

Grade 8 math · Addition, Multiplication, Rounding, Word problems, Division · Reading level grades 7-9

Detective: _____ **Date:** _____

Someone stole the Golden Glove Trophy right before the championship game at Grand Diamond Stadium! Stadium security cameras captured a masked intruder using trick pitches and sneaky gear to bypass the outfield gates.

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	PITCH STYLE	GEAR TECH	BATTING STANCE	CAP STYLE	PITCHING FLAW
Ted Williams	slider snap	pine tar grip	right handed stance	pinstripe cap	wet baseball dirt
Jackie Robinson	knuckleball glide	pine tar grip	right handed stance	pinstripe cap	loud stadium cheer
Freddie Freeman	curveball spin	pine tar grip	left handed stance	stitched red cap	sun glare
Mike Trout	curveball spin	shadow slide	left handed stance	pinstripe cap	loud stadium cheer
Corey Seager	fastball blast	shadow slide	left handed stance	pinstripe cap	loud stadium cheer
Ronald Acuna	fastball blast	shadow slide	left handed stance	stitched red cap	loud stadium cheer
Ken Griffey	fastball blast	shadow slide	left handed stance	pinstripe cap	sun glare
Clayton Kershaw	changeup trick	shadow slide	left handed stance	pinstripe cap	loud stadium cheer
Adley Rutschman	fastball blast	pine tar grip	left handed stance	solid navy cap	wet baseball dirt
Gerrit Cole	changeup trick	bat radar	left handed stance	pinstripe cap	loud stadium cheer
Max Scherzer	fastball blast	pine tar grip	left handed stance	pinstripe cap	sun glare
Derek Jeter	fastball blast	laser throw	right handed stance	pinstripe cap	wet baseball dirt
Willie Mays	knuckleball glide	stealth cleat	right handed stance	stitched red cap	loud stadium cheer
Bryce Harper	knuckleball glide	stealth cleat	left handed stance	stitched red cap	loud stadium cheer
Jose Altuve	changeup trick	laser throw	right handed stance	stitched red cap	loud stadium cheer
Hank Aaron	knuckleball glide	shadow slide	right handed stance	pinstripe cap	sun glare
Aaron Judge	fastball blast	stealth cleat	right handed stance	pinstripe cap	sun glare
Mookie Betts	fastball blast	bat radar	right handed stance	solid navy cap	wet baseball dirt
Shohei Ohtani	fastball blast	laser throw	left handed stance	pinstripe cap	sun glare
Fernando Tatis	knuckleball glide	stealth cleat	left handed stance	pinstripe cap	loud stadium cheer
Justin Verlander	knuckleball glide	pine tar grip	right handed stance	stitched red cap	loud stadium cheer

CLUE 1

Addition

The head groundskeeper tallied up the missing baseball gear found scattered across the dugouts.

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

T						T										T	
7319	4865	3901	2765	8359	5589	7990	7319	3901	9022	8757	6271	7990	3901	2765	3571	7990	7319

					T						
9022	2765	3901	8359	5589	8359	7319	8757	8359	6271	8359	8757

$4148 + 3171 = \boxed{} \rightarrow \boxed{\text{T}}$

$3720 + 1869 = \boxed{} \rightarrow \boxed{\text{B}}$

$4661 + 4361 = \boxed{} \rightarrow \boxed{\text{U}}$

$954 + 1811 = \boxed{} \rightarrow \boxed{\text{S}}$

$2980 + 3291 = \boxed{} \rightarrow \boxed{\text{D}}$

$2656 + 1245 = \boxed{} \rightarrow \boxed{\text{E}}$

$5513 + 3244 = \boxed{} \rightarrow \boxed{\text{R}}$

$5297 + 3062 = \boxed{} \rightarrow \boxed{\text{A}}$

$2419 + 1152 = \boxed{} \rightarrow \boxed{\text{N}}$

$2857 + 2008 = \boxed{} \rightarrow \boxed{\text{H}}$

$2733 + 5257 = \boxed{} \rightarrow \boxed{\text{O}}$

Scratch space:

CLUE 2
Multiplication facts (1-12)

Detectives calculated total stadium seat sections by multiplying the rows by the seats per row.

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

W												W					
1	22	18	27	77	49	49	77	49	49	63	1	63	8	77	28	18	

96	63	27	144	77	144	35	63	18	18	22	27	3	49	18	63	27	64	77

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

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

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

$3 \times 1 = \square \rightarrow \text{G}$

$1 \times 8 = \square \rightarrow \text{L}$

$2 \times 9 = \square \rightarrow \text{T}$

$2 \times 11 = \square \rightarrow \text{I}$

$7 \times 4 = \square \rightarrow \text{F}$

$7 \times 9 = \square \rightarrow \text{A}$

$7 \times 7 = \square \rightarrow \text{S}$

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

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

$11 \times 7 = \square \rightarrow \text{E}$

$5 \times 7 = \square \rightarrow \text{B}$

Scratch space:

CLUE 3 Rounding

The electronic scoreboard radar gun rounded the pitch speeds to the nearest whole mile per hour.

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

A							A								
30	3000	2900	3700	20	9000	300	30	20	90	3700	1100	7000	200	110	70

	A													
370	30	1300	110	20	300	200	110	9000	3700	9000	900	110	7000	300

Round 30 to the nearest ten → **A**

Round 2,897 to the nearest hundred → **O**

Round 1,113 to the nearest hundred → **M**

Round 368 to the nearest ten → **F**

Round 309 to the nearest hundred → **T**

Round 69 to the nearest ten → **R**

Round 3,245 to the nearest thousand → **L**

Round 6,571 to the nearest thousand → **C**

Round 1,284 to the nearest hundred → **Z**

Round 3,714 to the nearest hundred → **U**

Round 8,555 to the nearest thousand → **S**

Round 206 to the nearest hundred → **H**

Round 107 to the nearest ten → **E**

Round 94 to the nearest ten → **I**

Round 890 to the nearest hundred → **P**

Round 19 to the nearest ten → **D**

Scratch space:

CLUE 4

Word problems

The lead umpire reviewed the equipment log data to track down where the extra baseballs went.

Solve each problem, then write its letter in the boxes to fill in the missing word.

A strand of P P C A P hair turned up at the scene.

95 71 40 118 34 107 71 95 109 95

Groundskeeper found 16 aluminum bats yesterday and 79 more today. How many aluminum bats in all?

Answer: → P

There were 126 aluminum bats. 8 were used up. How many aluminum bats are left?

Answer: → S

Groundskeeper found 31 signed baseballs yesterday and 78 more today. How many signed baseballs in all?

Answer: → E

Groundskeeper found 19 signed baseballs yesterday and 15 more today. How many signed baseballs in all?

Answer: → T

Groundskeeper found 51 leather gloves yesterday and 20 more today. How many leather gloves in all?

Answer: → I

Groundskeeper lined up 5 rows of 8 stadium hot dogs. How many stadium hot dogs in all?

Answer: → N

Groundskeeper found 61 stadium hot dogs yesterday and 46 more today. How many stadium hot dogs in all?

Answer: → R

Scratch space:

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

The stadium manager divided the leftover game tickets equally among the field maintenance crew.

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:

$11 \div 1 = \boxed{}$

$8 \div 8 = \boxed{}$

$108 \div 12 = \boxed{}$

$4 \div 1 = \boxed{}$

$88 \div 11 = \boxed{}$

$42 \div 6 = \boxed{}$

$24 \div 4 = \boxed{}$

$33 \div 11 = \boxed{}$

$132 \div 11 = \boxed{}$

$15 \div 3 = \boxed{}$

$12 \div 6 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain danced a knuckleball glide, then snuck in stealth cleats.
2. The villain snapped a slider snap, then executed a shadow slide.
3. The villain threw a curveball spin, then applied pine tar grip.
4. The villain tossed a changeup trick, then launched a laser throw.
5. The villain fired a fastball blast, then snuck in stealth cleats.
6. The villain threw a curveball spin, then launched a laser throw.
7. The villain fired a fastball blast, then activated bat radar.
8. The villain snapped a slider snap, then snuck in stealth cleats.
9. The villain tossed a changeup trick, then executed a shadow slide.
10. The villain fired a fastball blast, then executed a shadow slide.
11. The villain threw a curveball spin, then executed a shadow slide.
12. The villain fired a fastball blast, then applied pine tar grip.

Answer Key

The Mystery of the Grand Diamond Sabotage

Culprit: Corey Seager

fastball blast · shadow slide · left handed stance · pinstripe cap · loud stadium cheer

Trail: Start 21 → Clue 1 19 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SABOTEUR DOES NOT USE A BAT RADAR"

$4148 + 3171 = 7319$ (T) · $3720 + 1869 = 5589$ (B) · $4661 + 4361 = 9022$ (U) · $954 + 1811 = 2765$ (S) · $2980 + 3291 = 6271$ (D) · $2656 + 1245 = 3901$ (E) · $5513 + 3244 = 8757$ (R) · $5297 + 3062 = 8359$ (A) · $2419 + 1152 = 3571$ (N) · $2857 + 2008 = 4865$ (H) · $2733 + 5257 = 7990$ (O)

Clue 2 (Multiplication facts (1-12)): "WITNESSES SAW A LEFT HANDED BATTING STANCE"

$1 \times 1 = 1$ (W) · $3 \times 9 = 27$ (N) · $12 \times 8 = 96$ (H) · $3 \times 1 = 3$ (G) · $1 \times 8 = 8$ (L) · $2 \times 9 = 18$ (T) · $2 \times 11 = 22$ (I) · $7 \times 4 = 28$ (F) · $7 \times 9 = 63$ (A) · $7 \times 7 = 49$ (S) · $8 \times 8 = 64$ (C) · $12 \times 12 = 144$ (D) · $11 \times 7 = 77$ (E) · $5 \times 7 = 35$ (B)

Clue 3 (Rounding): "A LOUD STADIUM CHEER FAZED THE SUSPECT"

Round 30 to the nearest ten = 30 (A) · Round 2,897 to the nearest hundred = 2900 (O) · Round 1,113 to the nearest hundred = 1100 (M) · Round 368 to the nearest ten = 370 (F) · Round 309 to the nearest hundred = 300 (T) · Round 69 to the nearest ten = 70 (R) · Round 3,245 to the nearest thousand = 3000 (L) · Round 6,571 to the nearest thousand = 7000 (C) · Round 1,284 to the nearest hundred = 1300 (Z) · Round 3,714 to the nearest hundred = 3700 (U) · Round 8,555 to the nearest thousand = 9000 (S) · Round 206 to the nearest hundred = 200 (H) · Round 107 to the nearest ten = 110 (E) · Round 94 to the nearest ten = 90 (I) · Round 890 to the nearest hundred = 900 (P) · Round 19 to the nearest ten = 20 (D)

Clue 4 (Word problems): "PINSTRIPE CAP"

Groundskeeper found 16 aluminum bats yesterday and 79 more today. How many aluminum bats in all? = 95 (P) · There were 126 aluminum bats. 8 were used up. How many aluminum bats are left? = 118 (S) · Groundskeeper found 31 signed baseballs yesterday and 78 more today. How many signed baseballs in all? = 109 (E) · Groundskeeper found 19 signed baseballs yesterday and 15 more today. How many signed baseballs in all? = 34 (T) · Groundskeeper found 51 leather gloves yesterday and 20 more today. How many leather gloves in all? = 71 (I) · Groundskeeper lined up 5 rows of 8 stadium hot dogs. How many stadium hot dogs in all? = 40 (N) · Groundskeeper found 61 stadium hot dogs yesterday and 46 more today. How many stadium hot dogs in all? = 107 (R)

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

$11 \div 1 = 11$ · $8 \div 8 = 1$ · $108 \div 12 = 9$ · $4 \div 1 = 4$ · $88 \div 11 = 8$ · $42 \div 6 = 7$ · $24 \div 4 = 6$ · $33 \div 11 = 3$ · $132 \div 11 = 12$ · $15 \div 3 = 5$ · $12 \div 6 = 2$