



The Case of the Mid-Air Stadium Sabotage

Grade 7 math · Integers, Percentages, Order of operations, Exponents, Two-step equations · Reading level grades 7-9

Detective: _____ **Date:** _____

A mystery culprit is disrupting the championship game by hijacking equipment trucks and candy supply flights! The Head Logistics Coordinator needs your math expertise to analyze transport logs, track down clues, and unmask the stadium saboteur before kickoff.

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	SIGNATURE MOVE	ESCAPE VEHICLE	DOMINANT HAND	CAP COLOR	FAVORITE SNACK
Serena Williams	Long Drive	Big Rig	Left Handed	Gold Cap	Licorice
Sue Bird	Slam Dunk	Delivery Van	Left Handed	Blue Cap	Gummy Bears
A'ja Wilson	Long Drive	Freight Plane	Left Handed	Blue Cap	Gummy Bears
Derek Jeter	Sky Hook	Semi Truck	Left Handed	Blue Cap	Gummy Bears
Giannis Antetokounmpo	Curveball	Semi Truck	Right Handed	Blue Cap	Licorice
Shaquille O'Neal	Curveball	Semi Truck	Right Handed	Gold Cap	Bubblegum
Patrick Mahomes	Curveball	Semi Truck	Right Handed	Gold Cap	Licorice
Aaron Judge	Sky Hook	Delivery Van	Left Handed	Gold Cap	Licorice
Travis Kelce	Long Drive	Semi Truck	Right Handed	Gold Cap	Bubblegum
Shohei Ohtani	Fastball	Semi Truck	Left Handed	Blue Cap	Gummy Bears
Hank Aaron	Fastball	Freight Plane	Left Handed	Red Cap	Bubblegum
LeBron James	Slam Dunk	Delivery Van	Right Handed	Gold Cap	Gummy Bears
Angel Reese	Long Drive	Delivery Van	Right Handed	Red Cap	Licorice
Mike Trout	Long Drive	Big Rig	Right Handed	Gold Cap	Licorice
Mookie Betts	Long Drive	Cargo Jet	Left Handed	Gold Cap	Bubblegum
Sabrina Ionescu	Sky Hook	Semi Truck	Left Handed	Blue Cap	Bubblegum
Steph Curry	Curveball	Delivery Van	Left Handed	Red Cap	Licorice
Candace Parker	Sky Hook	Delivery Van	Right Handed	Gold Cap	Bubblegum
Michael Jordan	Fastball	Freight Plane	Right Handed	Gold Cap	Bubblegum
Ken Griffey Jr	Long Drive	Semi Truck	Right Handed	Red Cap	Bubblegum
Caitlin Clark	Slam Dunk	Cargo Jet	Right Handed	Gold Cap	Bubblegum

CLUE 1

The stadium scoreboard recorded temperature shifts and gain-loss yardage in the storage hangar. You balance the negative and positive integer logs to decode the first lead.

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

A 2x10 grid of boxes. The top row contains the following sequence: an orange box with 'T', three empty boxes, an orange box with 'T', three empty boxes, an orange box with 'T', four empty boxes, and an orange box with 'T'. The bottom row contains the following sequence: three empty boxes, an empty box, an empty box, an empty box, an empty box, an empty box, an empty box, an orange box with 'T', five empty boxes, and an empty box.

T				T												T	
7	17	30	5	14	2	26	7	30	28	27	15	26	30	5	19	26	7
28	5	30	14	10	27	30	13	23	17	7	22	6	14	19	30		

$$(-8) + 15 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$(-13) + 19 = \boxed{} \rightarrow \boxed{\text{L}}$$

$3 - (-11) = \boxed{} \rightarrow \boxed{\mathbf{A}}$

$10 - (-3) = \boxed{} \rightarrow \boxed{\text{I}}$

$$(-1) + 20 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$29 - (-1) = \boxed{} \rightarrow \boxed{\text{E}}$$

$$(-11) + 26 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$18 - (-8) = \boxed{} \rightarrow \boxed{0}$$

$$3 - (-2) = \boxed{} \rightarrow \boxed{\mathbf{S}}$$

$3 - (-7) = \boxed{} \rightarrow \boxed{\mathbf{F}}$

$$(-6) + 33 = \boxed{} \rightarrow \boxed{\mathbf{R}}$$

$$(-14) + 37 = \boxed{} \rightarrow \boxed{\text{G}}$$

$$4 - (-13) = \boxed{} \rightarrow \boxed{\text{H}}$$

$7 - (-15) = \boxed{} \rightarrow \boxed{\text{P}}$

$$(-6) + 8 = \boxed{} \rightarrow \boxed{\mathbf{B}}$$

$$21 - (-7) = \boxed{} \rightarrow \boxed{\mathbf{U}}$$

Scratch space:

CLUE 2

Concession stands logged target candy sales versus actual deliveries across the arena. You calculate the percentage discounts to unlock the next piece of evidence.

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



 31 23 10 19 39 22 9 6 10 54 41 31 3 1 14 31



 39 22 47 3 9 3 54 28 45 23 45 31 31

50% of 62 = $\rightarrow$ **S**

40% of 35 = → **W**

20% of 30 = → **Y**

25% of 188 = → **G**

60% of 5 = → **H**

5% of 820 = → **M**

25% of 88 = $\rightarrow$

75% of 60 = → **D**

60% of 15 = → **T**

10% of 230 = → **E**

5% of 20 = →

20% of 270 = → **A**

25% of 112 = $\rightarrow$ **N**

10% of 190 = $\rightarrow$ **U**

60% of 65 = $\rightarrow$ **R**

50% of 20 = $\rightarrow$ **C**

Scratch space:

Order of operations

The stadium cargo crane follows a strict protocol sequence for lifting heavy semi-truck crates. You solve the order of operations code on the dispatch console to read the log.

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

83 73 83 32 88 93 91 10 31 87 32 32 88 10 47 32 24 88 93 88

87 64 66 73 66 66 17 88 53 73 113

$$10 \times 10^{-17} = \boxed{} \rightarrow \boxed{\text{S}}$$

$$5 \times 10 - 3 = \boxed{} \rightarrow \mathbf{A}$$

$$7 \times 12 - 11 = \boxed{} \rightarrow \boxed{\mathbf{U}}$$

$$48 + 2 \times 9 = \boxed{} \rightarrow \boxed{\mathbf{B}}$$

$$7 + 5 \times 5 = \boxed{} \rightarrow \boxed{\text{P}}$$

$10 \times 11 - 22 = \boxed{} \rightarrow \mathbf{E}$

$9 \times 7 - 10 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

$12 \times 10^{-7} = \boxed{} \rightarrow \mathbf{M}$

$$4 + 9 \times 3 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$46 + 5 \times 9 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$11 \times 3 - 16 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$47 + 8 \times 5 = \boxed{} \rightarrow \boxed{\text{O}}$$

$2 + 4 \times 2 = \boxed{} \rightarrow \boxed{\mathbf{D}}$

$6 \times 12 - 8 = \boxed{} \rightarrow \boxed{\text{F}}$

$$5 \times 7 - 11 = \boxed{} \rightarrow \boxed{1}$$

$12 \times 8 - 3 = \boxed{} \rightarrow \boxed{\text{C}}$

Scratch space:

CLUE 4 Exponents

The runway radar tower calculates radio signal power increases using exponential growth patterns. Computing the exponent power values reveals the jet flight path.

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

A																	
289	27	361	256	49	16	121	49	243	64	128	196	289	343	32	289	4	
									A								
128	361	243	343	343	400	128	324	400	289	361	121	16	400	36	400	121	

$17^2 = \square \rightarrow$ A	$3^5 = \square \rightarrow$ O	$4^2 = \square \rightarrow$ H	$18^2 = \square \rightarrow$ N
$2^7 = \square \rightarrow$ D	$2^2 = \square \rightarrow$ S	$19^2 = \square \rightarrow$ R	$4^4 = \square \rightarrow$ I
$8^2 = \square \rightarrow$ L	$7^2 = \square \rightarrow$ G	$11^2 = \square \rightarrow$ T	$6^2 = \square \rightarrow$ J
$2^5 = \square \rightarrow$ W	$14^2 = \square \rightarrow$ C	$7^3 = \square \rightarrow$ P	$20^2 = \square \rightarrow$ E
$3^3 = \square \rightarrow$ B			

Scratch space:

CLUE 5**Two-step equations - the last clue**

The stadium fueling terminal balances truck fuel capacities against weight distribution equations. Solving the two-step equation gives you the final suspect coordinates.

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:

$3x + 6 = 18, x = \boxed{}$

$6x + 1 = 61, x = \boxed{}$

$3x + 1 = 4, x = \boxed{}$

$5x + 7 = 32, x = \boxed{}$

$2x + 3 = 7, x = \boxed{}$

$4x + 9 = 57, x = \boxed{}$

$4x + 9 = 53, x = \boxed{}$

$4x + 11 = 43, x = \boxed{}$

$2x + 9 = 23, x = \boxed{}$

$2x + 12 = 24, x = \boxed{}$

$5x + 11 = 26, x = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain snaps a curveball, then speeds away in a semi truck.
2. The villain smashes a slam dunk, then boards a freight plane.
3. The villain smashes a slam dunk, then speeds away in a semi truck.
4. The villain smashes a slam dunk, then escapes in a cargo jet.
5. The villain smashes a slam dunk, then drives off in a big rig.
6. The villain smashes a slam dunk, then vanishes in a delivery van.
7. The villain sinks a sky hook, then speeds away in a semi truck.
8. The villain launches a long drive, then vanishes in a delivery van.
9. The villain launches a long drive, then speeds away in a semi truck.
10. The villain sinks a sky hook, then vanishes in a delivery van.
11. The villain sinks a sky hook, then drives off in a big rig.
12. The villain hurls a fastball, then boards a freight plane.

Answer Key

The Case of the Mid-Air Stadium Sabotage

Culprit: Travis Kelce

Long Drive · Semi Truck · Right Handed · Gold Cap · Bubblegum

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Integers): "THE SABOTEUR DOES NOT USE A FREIGHT PLANE"

$(-8) + 15 = 7$ (T) · $(-13) + 19 = 6$ (L) · $3 - (-11) = 14$ (A) · $10 - (-3) = 13$ (I) · $(-1) + 20 = 19$ (N) · $29 - (-1) = 30$ (E) · $(-11) + 26 = 15$ (D) · $18 - (-8) = 26$ (O) · $3 - (-2) = 5$ (S) · $3 - (-7) = 10$ (F) · $(-6) + 33 = 27$ (R) · $(-14) + 37 = 23$ (G) · $4 - (-13) = 17$ (H) · $7 - (-15) = 22$ (P) · $(-6) + 8 = 2$ (B) · $21 - (-7) = 28$ (U)

Clue 2 (Percentages): "SECURITY CAM SHOWS RIGHT HANDED TOSS"

50% of 62 = 31 (S) · 40% of 35 = 14 (W) · 20% of 30 = 6 (Y) · 25% of 188 = 47 (G) · 60% of 5 = 3 (H) · 5% of 820 = 41 (M) · 25% of 88 = 22 (I) · 75% of 60 = 45 (D) · 60% of 15 = 9 (T) · 10% of 230 = 23 (E) · 5% of 20 = 1 (O) · 20% of 270 = 54 (A) · 25% of 112 = 28 (N) · 10% of 190 = 19 (U) · 60% of 65 = 39 (R) · 50% of 20 = 10 (C)

Clue 3 (Order of operations): "SUSPECT DROPPED A PIECE OF BUBBLEGUM"

$10 \times 10 - 17 = 83$ (S) · $5 \times 10 - 3 = 47$ (A) · $7 \times 12 - 11 = 73$ (U) · $48 + 2 \times 9 = 66$ (B) · $7 + 5 \times 5 = 32$ (P) · $10 \times 11 - 22 = 88$ (E) · $9 \times 7 - 10 = 53$ (G) · $12 \times 10 - 7 = 113$ (M) · $4 + 9 \times 3 = 31$ (R) · $46 + 5 \times 9 = 91$ (T) · $11 \times 3 - 16 = 17$ (L) · $47 + 8 \times 5 = 87$ (O) · $2 + 4 \times 2 = 10$ (D) · $6 \times 12 - 8 = 64$ (F) · $5 \times 7 - 11 = 24$ (I) · $12 \times 8 - 3 = 93$ (C)

Clue 4 (Exponents): "A BRIGHT GOLD CAP WAS DROPPED NEAR THE JET"

$17^2 = 289$ (A) · $3^5 = 243$ (O) · $4^2 = 16$ (H) · $18^2 = 324$ (N) · $2^7 = 128$ (D) · $2^2 = 4$ (S) · $19^2 = 361$ (R) · $4^4 = 256$ (I) · $8^2 = 64$ (L) · $7^2 = 49$ (G) · $11^2 = 121$ (T) · $6^2 = 36$ (J) · $2^5 = 32$ (W) · $14^2 = 196$ (C) · $7^3 = 343$ (P) · $20^2 = 400$ (E) · $3^3 = 27$ (B)

Clue 5 (Two-step equations): surviving statement is box 9 → Travis Kelce

$3x + 6 = 18, x = 4$ · $6x + 1 = 61, x = 10$ · $3x + 1 = 4, x = 1$ · $5x + 7 = 32, x = 5$ · $2x + 3 = 7, x = 2$ · $4x + 9 = 57, x = 12$ · $4x + 9 = 53, x = 11$ · $4x + 11 = 43, x = 8$ · $2x + 9 = 23, x = 7$ · $2x + 12 = 24, x = 6$ · $5x + 11 = 26, x = 3$