



The All-Star Arena Heist

Grade 6 math · Multiplication, Percentages, Exponents, Order of operations, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

The Golden Ball trophy has vanished from the arena vault right before the final buzzer! A sneaky saboteur swapped the real trophy with a deflated basketball. The League Commissioner has locked the stadium down so the Kid Detectives can search the rosters and find the culprit.

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 Court 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	LUCKY GEAR	SHOOTING HAND	HAIR STYLE	DEFENSIVE WEAKNESS
Damian Lillard	Three Point Swish	Silver Grip Gloves	Right Handed	Dyed Neon Blue	Loud Crowd Noise
Domantas Sabonis	Monster Slam Dunk	Silver Grip Gloves	Right Handed	Sleek Buzz Cut	Loud Crowd Noise
Trae Young	Three Point Swish	Squeaky Golden Shoes	Left Handed	Curly Afro	Full Court Trap
Devin Booker	No Look Pass	Wireless Music Headphones	Left Handed	Curly Afro	Double Team Press
James Harden	No Look Pass	Squeaky Golden Shoes	Left Handed	Curly Afro	Double Team Press
Shai Gilgeous	Ankle Breaker Crossover	Wireless Music Headphones	Left Handed	Dyed Neon Blue	Loud Crowd Noise
Anthony Davis	Ankle Breaker Crossover	Glow In The Dark Socks	Right Handed	Sleek Buzz Cut	Loud Crowd Noise
Jaylen Brown	Fadeaway Jumper	Wireless Music Headphones	Left Handed	Sleek Buzz Cut	Double Team Press
DeAaron Fox	Fadeaway Jumper	High Bounce Wristband	Right Handed	Dyed Neon Blue	Full Court Trap
LeBron James	Fadeaway Jumper	Wireless Music Headphones	Right Handed	Sleek Buzz Cut	Double Team Press
Kevin Durant	Ankle Breaker Crossover	High Bounce Wristband	Left Handed	Dyed Neon Blue	Double Team Press
Nikola Jokic	Monster Slam Dunk	Squeaky Golden Shoes	Right Handed	Sleek Buzz Cut	Loud Crowd Noise
Chris Paul	No Look Pass	Glow In The Dark Socks	Right Handed	Sleek Buzz Cut	Double Team Press
Jayson Tatum	Ankle Breaker Crossover	Glow In The Dark Socks	Right Handed	Curly Afro	Double Team Press
Luka Doncic	Fadeaway Jumper	High Bounce Wristband	Right Handed	Curly Afro	Loud Crowd Noise
Joel Embiid	Fadeaway Jumper	Squeaky Golden Shoes	Left Handed	Curly Afro	Full Court Trap
Stephen Curry	Ankle Breaker Crossover	Wireless Music Headphones	Right Handed	Sleek Buzz Cut	Loud Crowd Noise
Giannis Antetokounmpo	Fadeaway Jumper	Squeaky Golden Shoes	Right Handed	Curly Afro	Loud Crowd Noise
Ja Morant	Monster Slam Dunk	Glow In The Dark Socks	Right Handed	Sleek Buzz Cut	Loud Crowd Noise
Paul George	Monster Slam Dunk	Silver Grip Gloves	Left Handed	Sleek Buzz Cut	Loud Crowd Noise
Zion Williamson	Three Point Swish	Squeaky Golden Shoes	Left Handed	Sleek Buzz Cut	Loud Crowd Noise

CLUE 1
Multiplication facts (1-12)

The court manager counts the rows of basketball racks inside the gym to see how many balls are missing. Multiply the racks by the balls per rack to decode the first clue.

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

T																	T		
49	4	99	70	90	22	22	121	90	24	63	72	99	6	24	72	49			
28	99	121	12	6	90	22	70	99	12	33	12	90	55	33	22	72	70	99	6

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

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

$2 \times 12 = \square \rightarrow \text{N}$

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

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

$11 \times 3 = \square \rightarrow \text{G}$

$10 \times 9 = \square \rightarrow \text{I}$

$2 \times 2 = \square \rightarrow \text{H}$

$5 \times 11 = \square \rightarrow \text{P}$

$11 \times 11 = \square \rightarrow \text{A}$

$9 \times 11 = \square \rightarrow \text{E}$

$1 \times 12 = \square \rightarrow \text{R}$

$3 \times 2 = \square \rightarrow \text{S}$

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

$8 \times 9 = \square \rightarrow \text{O}$

Scratch space:

CLUE 2 Percentages

The arena stats screen flashes the overall free throw shooting accuracy. Work out the percentage of successful shots to unlock the second clue.

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

T																T
6	24	37	18	21	37	45	7	5	10	34	33	39	27	19	6	

				T						T						
18	24	11	11	6	18	27	19	12	24	6	24	45	21	15	37	15

$60\% \text{ of } 10 = \square \rightarrow \text{ T }$

$75\% \text{ of } 44 = \square \rightarrow \text{ L }$

$5\% \text{ of } 300 = \square \rightarrow \text{ D }$

$50\% \text{ of } 20 = \square \rightarrow \text{ C }$

$50\% \text{ of } 22 = \square \rightarrow \text{ O }$

$10\% \text{ of } 190 = \square \rightarrow \text{ I }$

$60\% \text{ of } 75 = \square \rightarrow \text{ A }$

$10\% \text{ of } 50 = \square \rightarrow \text{ Y }$

$5\% \text{ of } 780 = \square \rightarrow \text{ P }$

$5\% \text{ of } 740 = \square \rightarrow \text{ E }$

$75\% \text{ of } 32 = \square \rightarrow \text{ H }$

$50\% \text{ of } 36 = \square \rightarrow \text{ S }$

$75\% \text{ of } 16 = \square \rightarrow \text{ G }$

$5\% \text{ of } 540 = \square \rightarrow \text{ R }$

$5\% \text{ of } 140 = \square \rightarrow \text{ K }$

$25\% \text{ of } 136 = \square \rightarrow \text{ U }$

$20\% \text{ of } 105 = \square \rightarrow \text{ N }$

Scratch space:

CLUE 3 Exponents

The team tournament bracket doubles in size with every new round. Solve the exponential growth of the bracket to reveal the third clue.

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

T																	
100	121	125	256	27	256	361	125	8	100	256	121	225	169	9	324	256	
49	225	81	243	25	81	27	32	8	225	81	343	32	9	81	169	256	125

$10^2 = \square \rightarrow \text{T}$	$7^2 = \square \rightarrow \text{F}$	$3^4 = \square \rightarrow \text{O}$	$3^3 = \square \rightarrow \text{U}$
$13^2 = \square \rightarrow \text{I}$	$5^3 = \square \rightarrow \text{E}$	$18^2 = \square \rightarrow \text{K}$	$15^2 = \square \rightarrow \text{R}$
$4^4 = \square \rightarrow \text{S}$	$2^5 = \square \rightarrow \text{D}$	$7^3 = \square \rightarrow \text{W}$	$5^2 = \square \rightarrow \text{L}$
$11^2 = \square \rightarrow \text{H}$	$2^3 = \square \rightarrow \text{C}$	$3^2 = \square \rightarrow \text{N}$	$19^2 = \square \rightarrow \text{P}$
$3^5 = \square \rightarrow \text{M}$			

Scratch space:

CLUE 4

The scoreboard ticket machine calculates the total price of snacks, VIP passes, and fan discounts. Solve the multi-step formula to get the fourth clue.

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

Two rows of 15 empty boxes each, with some boxes containing numbers and one box containing the letter 'T'.

Row 1: 29, 69, 34, 60, 49, 68, 34, 65, 29, 60, 8, 12, 29, 35, 11, 73, 35, 76, 49, 17

Row 2: 12, 65, 45, 34, 34, 61, 63, 76, 30, 30, 27, 76, 29, 69, 12, 60, 11

$$8 + 7 \times 3 = \boxed{} \rightarrow \boxed{\mathbf{T}}$$

$2 + 3 \times 2 = \square \rightarrow \mathbf{G}$

$$13 + 6 \times 8 = \boxed{} \rightarrow \boxed{\text{K}}$$

$11 + 9 \times 6 = \boxed{} \rightarrow \boxed{\text{S}}$

$$59 + 2 \times 2 = \boxed{} \rightarrow \boxed{\mathbf{B}}$$

$$15 + 5 \times 6 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$5 \times 11 - 6 = \boxed{} \rightarrow \mathbf{N}$$

$45 + 3 \times 5 = \boxed{} \rightarrow \boxed{} \mid$

$$6 \times 7 - 8 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$12 + 5 \times 3 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$51 + 2 \times 9 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$40 + 7 \times 4 = \boxed{} \rightarrow \boxed{\mathbf{v}}$$

$$28 + 5 \times 9 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$4 \times 5 - 3 = \boxed{} \rightarrow \boxed{\mathbf{D}}$$

$$7 + 7 \times 4 = \boxed{} \rightarrow \boxed{0}$$

$$2 + 3 \times 3 = \boxed{} \rightarrow \boxed{\mathbf{R}}$$

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

$$6 \times 9 - 24 = \boxed{} \rightarrow \boxed{\mathbf{Z}}$$

$$68 + 2 \times 4 = \boxed{} \rightarrow \boxed{\text{U}}$$

Scratch space:

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

The head coach divides the remaining practice cones evenly among the five starting players. Calculate the share of cones each player gets to reveal the final clue.

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:

$24 \div 8 = \boxed{}$

$28 \div 7 = \boxed{}$

$77 \div 11 = \boxed{}$

$108 \div 12 = \boxed{}$

$25 \div 5 = \boxed{}$

$132 \div 12 = \boxed{}$

$132 \div 11 = \boxed{}$

$72 \div 12 = \boxed{}$

$40 \div 4 = \boxed{}$

$8 \div 4 = \boxed{}$

$10 \div 10 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain threw a sneaky no look pass to distract security, then bouncing high with a high bounce wristband.
2. The villain performed an ankle breaker crossover on a guard, then fumbling the ball with silver grip gloves.
3. The villain made a monster slam dunk over the main gate, then leaving prints with squeaky golden shoes.
4. The villain performed an ankle breaker crossover on a guard, then blasting tunes on wireless music headphones.
5. The villain made a monster slam dunk over the main gate, then fumbling the ball with silver grip gloves.
6. The villain made a monster slam dunk over the main gate, then blasting tunes on wireless music headphones.
7. The villain performed an ankle breaker crossover on a guard, then leaving a trail with glow in the dark socks.
8. The villain made a monster slam dunk over the main gate, then leaving a trail with glow in the dark socks.
9. The villain performed an ankle breaker crossover on a guard, then leaving prints with squeaky golden shoes.
10. The villain hit a wild three point swish to escape, then blasting tunes on wireless music headphones.
11. The villain shot a brilliant fadeaway jumper over the fence, then leaving prints with squeaky golden shoes.
12. The villain made a monster slam dunk over the main gate, then bouncing high with a high bounce wristband.

Answer Key

The All-Star Arena Heist

Culprit: Ja Morant

Monster Slam Dunk · Glow In The Dark Socks · Right Handed · Sleek Buzz Cut · Loud Crowd Noise

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT WEAR SILVER GRIP GLOVES"

$7 \times 7 = 49$ (T) · $2 \times 11 = 22$ (L) · $2 \times 12 = 24$ (N) · $7 \times 9 = 63$ (D) · $10 \times 7 = 70$ (V) · $11 \times 3 = 33$ (G) · $10 \times 9 = 90$ (I) · $2 \times 2 = 4$ (H) · $5 \times 11 = 55$ (P) · $11 \times 11 = 121$ (A) · $9 \times 11 = 99$ (E) · $1 \times 12 = 12$ (R) · $3 \times 2 = 6$ (S) · $4 \times 7 = 28$ (W) · $8 \times 9 = 72$ (O)

Clue 2 (Percentages): "THE SNEAKY CULPRIT SHOOTS RIGHT HANDED"

60% of 10 = 6 (T) · 75% of 44 = 33 (L) · 5% of 300 = 15 (D) · 50% of 20 = 10 (C) · 50% of 22 = 11 (O) · 10% of 190 = 19 (I) · 60% of 75 = 45 (A) · 10% of 50 = 5 (Y) · 5% of 780 = 39 (P) · 5% of 740 = 37 (E) · 75% of 32 = 24 (H) · 50% of 36 = 18 (S) · 75% of 16 = 12 (G) · 5% of 540 = 27 (R) · 5% of 140 = 7 (K) · 25% of 136 = 34 (U) · 20% of 105 = 21 (N)

Clue 3 (Exponents): "THE SUSPECT SHRINKS FROM LOUD CROWD NOISE"

$10^2 = 100$ (T) · $7^2 = 49$ (F) · $3^4 = 81$ (O) · $3^3 = 27$ (U) · $13^2 = 169$ (I) · $5^3 = 125$ (E) · $18^2 = 324$ (K) · $15^2 = 225$ (R) · $4^4 = 256$ (S) · $2^5 = 32$ (D) · $7^3 = 343$ (W) · $5^2 = 25$ (L) · $11^2 = 121$ (H) · $2^3 = 8$ (C) · $3^2 = 9$ (N) · $19^2 = 361$ (P) · $3^5 = 243$ (M)

Clue 4 (Order of operations): "THE INVESTIGATOR FOUND A SLEEK BUZZ CUT HAIR"

$8 + 7 \times 3 = 29$ (T) · $2 + 3 \times 2 = 8$ (G) · $13 + 6 \times 8 = 61$ (K) · $11 + 9 \times 6 = 65$ (S) · $59 + 2 \times 2 = 63$ (B) · $15 + 5 \times 6 = 45$ (L) · $5 \times 11 - 6 = 49$ (N) · $45 + 3 \times 5 = 60$ (I) · $6 \times 7 - 8 = 34$ (E) · $12 + 5 \times 3 = 27$ (C) · $51 + 2 \times 9 = 69$ (H) · $40 + 7 \times 4 = 68$ (V) · $28 + 5 \times 9 = 73$ (F) · $4 \times 5 - 3 = 17$ (D) · $7 + 7 \times 4 = 35$ (O) · $2 + 3 \times 3 = 11$ (R) · $3 \times 8 - 12 = 12$ (A) · $6 \times 9 - 24 = 30$ (Z) · $68 + 2 \times 4 = 76$ (U)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Ja Morant

$24 \div 8 = 3$ · $28 \div 7 = 4$ · $77 \div 11 = 7$ · $108 \div 12 = 9$ · $25 \div 5 = 5$ · $132 \div 12 = 11$ · $132 \div 11 = 12$ · $72 \div 12 = 6$ · $40 \div 4 = 10$ · $8 \div 4 = 2$ · $10 \div 10 = 1$