



The Case of the Golden Game Ball

Grade 4 math · Rounding, Addition, Subtraction, Multiplication, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

The championship game is tonight! But right before tip-off, someone snatched the Golden Game Ball from the Head Coach's locker. The arena is locked down, and the suspect is still inside. We need your math skills to help the Hoop City Police find the thief!

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 Sneaker Bandit 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	SPECIAL GEAR	SHOOTING ARM	SWEATBAND COLOR	COURT HAZARD
Devin Booker	lightning crossover	magnetic wristband	wears a right sleeve	lime green sweatband	squeaky hardwood floors
Anthony Davis	unblockable fadeaway	glowing sneakers	wears a right sleeve	bright blue sweatband	squeaky hardwood floors
Shai Gilgeous Alexander	no look alley oop	glowing sneakers	wears a left sleeve	lime green sweatband	squeaky hardwood floors
LaMelo Ball	no look alley oop	super grip socks	wears a left sleeve	lime green sweatband	loud whistle blow
Nikola Jokic	unblockable fadeaway	spring loaded insoles	wears a right sleeve	neon orange sweatband	sticky soda spill
Ja Morant	gravity defying dunk	super grip socks	wears a right sleeve	neon orange sweatband	squeaky hardwood floors
LeBron James	no look alley oop	glowing sneakers	wears a right sleeve	bright blue sweatband	squeaky hardwood floors
Damian Lillard	no look alley oop	bouncing headband	wears a right sleeve	neon orange sweatband	squeaky hardwood floors
Donovan Mitchell	lightning crossover	spring loaded insoles	wears a right sleeve	lime green sweatband	squeaky hardwood floors
Kyrie Irving	no look alley oop	bouncing headband	wears a left sleeve	neon orange sweatband	sticky soda spill
Jayson Tatum	unblockable fadeaway	super grip socks	wears a right sleeve	neon orange sweatband	squeaky hardwood floors
Chris Paul	gravity defying dunk	bouncing headband	wears a left sleeve	bright blue sweatband	sticky soda spill
Giannis Antetokounmpo	half court buzzer beater	spring loaded insoles	wears a right sleeve	bright blue sweatband	squeaky hardwood floors
Kevin Durant	no look alley oop	magnetic wristband	wears a right sleeve	neon orange sweatband	loud whistle blow
Jimmy Butler	gravity defying dunk	glowing sneakers	wears a right sleeve	bright blue sweatband	loud whistle blow
Stephen Curry	gravity defying dunk	magnetic wristband	wears a right sleeve	neon orange sweatband	squeaky hardwood floors
DeAaron Fox	unblockable fadeaway	magnetic wristband	wears a left sleeve	neon orange sweatband	squeaky hardwood floors
Luka Doncic	lightning crossover	glowing sneakers	wears a right sleeve	bright blue sweatband	squeaky hardwood floors
Zion Williamson	no look alley oop	super grip socks	wears a right sleeve	neon orange sweatband	squeaky hardwood floors
James Harden	no look alley oop	magnetic wristband	wears a right sleeve	bright blue sweatband	sticky soda spill
Paul George	unblockable fadeaway	glowing sneakers	wears a left sleeve	lime green sweatband	squeaky hardwood floors

CLUE 1 Rounding

The laser security scanner on the vault only shows rounded numbers for weight. Let us round these fan attendance numbers to find the first clue!

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

T																T
2000	4300	430	3700	370	200	200	1700	370	300	290	230	430	700	300	230	2000

				T												
70	430	1700	1100	2000	4300	430	4300	430	1700	290	170	1700	300	290		

Round 1,664 to the nearest thousand → **T**

Round 369 to the nearest ten → **I**

Round 290 to the nearest ten → **D**

Round 278 to the nearest hundred → **N**

Round 3,723 to the nearest hundred → **V**

Round 193 to the nearest hundred → **L**

Round 676 to the nearest hundred → **S**

Round 4,290 to the nearest hundred → **H**

Round 173 to the nearest ten → **B**

Round 229 to the nearest ten → **O**

Round 433 to the nearest ten → **E**

Round 1,664 to the nearest hundred → **A**

Round 1,074 to the nearest hundred → **R**

Round 69 to the nearest ten → **W**

Scratch space:

CLUE 2 Addition

We need to tally up all the basketballs left in the storage racks. Add these practice balls together to unlock the next piece of evidence.

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

T															
2566	6672	6427	9670	4122	9670	9188	6427	9177	2566	6353	9841	3419	6427	3432	

				T											
3419	5189	4419	6672	2566	3432	3419	2915	9670	9786	6427	6427	6147	6427		

$994 + 1572 = \square \rightarrow$ T	$5019 + 4651 = \square \rightarrow$ S	$3425 + 1764 = \square \rightarrow$ I
$3195 + 3158 = \square \rightarrow$ W	$2934 + 6243 = \square \rightarrow$ C	$3168 + 2979 = \square \rightarrow$ V
$4350 + 5491 = \square \rightarrow$ O	$3239 + 6547 = \square \rightarrow$ L	$940 + 1975 = \square \rightarrow$ M
$6093 + 3095 = \square \rightarrow$ P	$1869 + 1563 = \square \rightarrow$ A	$3914 + 2758 = \square \rightarrow$ H
$2059 + 2063 = \square \rightarrow$ U	$1958 + 1461 = \square \rightarrow$ R	$1961 + 2458 = \square \rightarrow$ G
$3858 + 2569 = \square \rightarrow$ E		

Scratch space:

CLUE 3

Subtraction

The team jersey inventory is missing some jerseys. Subtract the dirty laundry from the total to see what the suspect dropped.

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

T															
4327	3974	5481	3886	5277	4600	5481	2554	6245	1434	5560	2948	5484	5484	6469	3886

						T							
3886	2948	5484	3333	5481	8406	4327	3974	5481	2363	8406	5484	3333	8154

$8332 - 4005 = \square \rightarrow \boxed{\text{T}}$

$8283 - 2799 = \square \rightarrow \boxed{\text{O}}$

$4028 - 142 = \square \rightarrow \boxed{\text{S}}$

$3288 - 925 = \square \rightarrow \boxed{\text{M}}$

$5857 - 376 = \square \rightarrow \boxed{\text{E}}$

$3319 - 371 = \square \rightarrow \boxed{\text{L}}$

$6576 - 107 = \square \rightarrow \boxed{\text{R}}$

$7034 - 789 = \square \rightarrow \boxed{\text{K}}$

$10844 - 2690 = \square \rightarrow \boxed{\text{N}}$

$4308 - 334 = \square \rightarrow \boxed{\text{H}}$

$4051 - 2617 = \square \rightarrow \boxed{\text{Y}}$

$10247 - 4970 = \square \rightarrow \boxed{\text{Q}}$

$6608 - 4054 = \square \rightarrow \boxed{\text{A}}$

$7945 - 4612 = \square \rightarrow \boxed{\text{W}}$

$7666 - 3066 = \square \rightarrow \boxed{\text{U}}$

$9274 - 868 = \square \rightarrow \boxed{\text{D}}$

$5798 - 238 = \square \rightarrow \boxed{\text{F}}$

Scratch space:

CLUE 4

Multiplication facts (1-12)

There are several rows of stadium seats where the thief was spotted. Multiply the rows by the seats to count the witnesses!

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

W																	
4	5	3	81	96	21	120	48	21	5	81	21	81	20	48	21	40	5

	W							
49	4	5	48	32	84	48	21	120

$2 \times 2 = \square \rightarrow \boxed{W}$

$4 \times 10 = \square \rightarrow \boxed{G}$

$3 \times 7 = \square \rightarrow \boxed{N}$

$9 \times 9 = \square \rightarrow \boxed{O}$

$8 \times 4 = \square \rightarrow \boxed{T}$

$7 \times 12 = \square \rightarrow \boxed{B}$

$10 \times 12 = \square \rightarrow \boxed{D}$

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

$12 \times 8 = \square \rightarrow \boxed{U}$

$5 \times 1 = \square \rightarrow \boxed{E}$

$5 \times 4 = \square \rightarrow \boxed{R}$

$6 \times 8 = \square \rightarrow \boxed{A}$

$3 \times 1 = \square \rightarrow \boxed{F}$

Scratch space:

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

The coach wants to share the remaining sports drinks equally among the players. Divide the bottles to get 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:

$24 \div 4 = \boxed{}$

$42 \div 6 = \boxed{}$

$81 \div 9 = \boxed{}$

$7 \div 7 = \boxed{}$

$24 \div 6 = \boxed{}$

$99 \div 9 = \boxed{}$

$55 \div 11 = \boxed{}$

$15 \div 5 = \boxed{}$

$24 \div 2 = \boxed{}$

$32 \div 4 = \boxed{}$

$40 \div 4 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain shot a half court buzzer beater, then sprinted away in super grip socks.
2. The villain tossed a no look alley oop, then sprinted away in super grip socks.
3. The villain shot a half court buzzer beater, then leaped away on spring loaded insoles.
4. The villain made a lightning crossover, then leaped away on spring loaded insoles.
5. The villain tossed a no look alley oop, then dashed off in glowing sneakers.
6. The villain slammed a gravity defying dunk, then sprinted away in super grip socks.
7. The villain slammed a gravity defying dunk, then escaped using a magnetic wristband.
8. The villain drained an unblockable fadeaway, then dashed off in glowing sneakers.
9. The villain drained an unblockable fadeaway, then sprinted away in super grip socks.
10. The villain made a lightning crossover, then dashed off in glowing sneakers.
11. The villain tossed a no look alley oop, then zoomed off wearing a bouncing headband.
12. The villain slammed a gravity defying dunk, then leaped away on spring loaded insoles.

Answer Key

The Case of the Golden Game Ball

Culprit: Zion Williamson

no look alley oop · super grip socks · wears a right sleeve · neon orange sweatband · squeaky hardwood floors

Trail: Start 21 → Clue 1 18 → Clue 2 14 → Clue 3 10 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT WEAR THE HEADBAND"

Round 1,664 to the nearest thousand = 2000 (T) · Round 369 to the nearest ten = 370 (I) · Round 290 to the nearest ten = 290 (D) · Round 278 to the nearest hundred = 300 (N) · Round 3,723 to the nearest hundred = 3700 (V) · Round 193 to the nearest hundred = 200 (L) · Round 676 to the nearest hundred = 700 (S) · Round 4,290 to the nearest hundred = 4300 (H) · Round 173 to the nearest ten = 170 (B) · Round 229 to the nearest ten = 230 (O) · Round 433 to the nearest ten = 430 (E) · Round 1,664 to the nearest hundred = 1700 (A) · Round 1,074 to the nearest hundred = 1100 (R) · Round 69 to the nearest ten = 70 (W)

Clue 2 (Addition): "THE SUSPECT WORE A RIGHT ARM SLEEVE"

$994 + 1572 = 2566$ (T) · $5019 + 4651 = 9670$ (S) · $3425 + 1764 = 5189$ (I) · $3195 + 3158 = 6353$ (W) · $2934 + 6243 = 9177$ (C) · $3168 + 2979 = 6147$ (V) · $4350 + 5491 = 9841$ (O) · $3239 + 6547 = 9786$ (L) · $940 + 1975 = 2915$ (M) · $6093 + 3095 = 9188$ (P) · $1869 + 1563 = 3432$ (A) · $3914 + 2758 = 6672$ (H) · $2059 + 2063 = 4122$ (U) · $1958 + 1461 = 3419$ (R) · $1961 + 2458 = 4419$ (G) · $3858 + 2569 = 6427$ (E)

Clue 3 (Subtraction): "THE SQUEAKY FLOORS SLOWED THEM DOWN"

$8332 - 4005 = 4327$ (T) · $8283 - 2799 = 5484$ (O) · $4028 - 142 = 3886$ (S) · $3288 - 925 = 2363$ (M) · $5857 - 376 = 5481$ (E) · $3319 - 371 = 2948$ (L) · $6576 - 107 = 6469$ (R) · $7034 - 789 = 6245$ (K) · $10844 - 2690 = 8154$ (N) · $4308 - 334 = 3974$ (H) · $4051 - 2617 = 1434$ (Y) · $10247 - 4970 = 5277$ (Q) · $6608 - 4054 = 2554$ (A) · $7945 - 4612 = 3333$ (W) · $7666 - 3066 = 4600$ (U) · $9274 - 868 = 8406$ (D) · $5798 - 238 = 5560$ (F)

Clue 4 (Multiplication facts (1-12)): "WE FOUND A NEON ORANGE SWEATBAND"

$2 \times 2 = 4$ (W) · $4 \times 10 = 40$ (G) · $3 \times 7 = 21$ (N) · $9 \times 9 = 81$ (O) · $8 \times 4 = 32$ (T) · $7 \times 12 = 84$ (B) · $10 \times 12 = 120$ (D) · $7 \times 7 = 49$ (S) · $12 \times 8 = 96$ (U) · $5 \times 1 = 5$ (E) · $5 \times 4 = 20$ (R) · $6 \times 8 = 48$ (A) · $3 \times 1 = 3$ (F)

Clue 5 (Division facts (1-12)): surviving statement is box 2 → Zion Williamson

$24 \div 4 = 6$ · $42 \div 6 = 7$ · $81 \div 9 = 9$ · $7 \div 7 = 1$ · $24 \div 6 = 4$ · $99 \div 9 = 11$ · $55 \div 11 = 5$ · $15 \div 5 = 3$ · $24 \div 2 = 12$ · $32 \div 4 = 8$ · $40 \div 4 = 10$