



The Mystery of the Missing Championship Ball

Grade 4 math · Rounding, Multi-step word problems, Addition, Subtraction, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

Right before the final buzzer sounded, the lights went out in the Arena Center. When they flashed back on, the golden Championship Ball was missing from the trophy stand! The culprit left a trail of chalky sneaker prints across the polished hardwood floor. It is up to you to decode the locker room clues and catch the Sneaker Bandit before the trophy ceremony is canceled.

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	SECRET GEAR	SHOOTING HAND	HEADBAND STYLE	DEFENSE FLAW
Chris Paul	unblockable fadeaway jumper	high-grip sticky gloves	left-handed shooter	sparkly star headband	hates full-court press
Luka Doncic	gravity-defying slam dunk	spring-loaded sneakers	left-handed shooter	neon yellow headband	hates full-court press
Damian Lillard	half-court buzzer-beater	weighted wrist tracker	right-handed shooter	sparkly star headband	falls for ball fakes
Russell Westbrook	gravity-defying slam dunk	super-bounce game ball	left-handed shooter	neon yellow headband	hates full-court press
LeBron James	no-look bounce pass	super-bounce game ball	right-handed shooter	neon yellow headband	hates full-court press
Kevin Durant	no-look bounce pass	weighted wrist tracker	right-handed shooter	striped retro headband	gets tired during fastbreaks
Kyrie Irving	no-look bounce pass	holographic shooting glasses	left-handed shooter	neon yellow headband	hates full-court press
Anthony Davis	no-look bounce pass	super-bounce game ball	right-handed shooter	sparkly star headband	hates full-court press
Zion Williamson	unblockable fadeaway jumper	high-grip sticky gloves	right-handed shooter	neon yellow headband	hates full-court press
Stephen Curry	lightning crossover dribble	weighted wrist tracker	left-handed shooter	sparkly star headband	gets tired during fastbreaks
Devin Booker	unblockable fadeaway jumper	holographic shooting glasses	right-handed shooter	neon yellow headband	hates full-court press
James Harden	no-look bounce pass	weighted wrist tracker	left-handed shooter	neon yellow headband	hates full-court press
Jayson Tatum	half-court buzzer-beater	holographic shooting glasses	left-handed shooter	sparkly star headband	hates full-court press
Trae Young	lightning crossover dribble	spring-loaded sneakers	left-handed shooter	striped retro headband	hates full-court press
Kawhi Leonard	gravity-defying slam dunk	high-grip sticky gloves	left-handed shooter	sparkly star headband	gets tired during fastbreaks
Klay Thompson	gravity-defying slam dunk	high-grip sticky gloves	right-handed shooter	striped retro headband	hates full-court press
Shaquille O'Neal	no-look bounce pass	weighted wrist tracker	left-handed shooter	neon yellow headband	falls for ball fakes
Nikola Jokic	unblockable fadeaway jumper	super-bounce game ball	left-handed shooter	neon yellow headband	hates full-court press
Michael Jordan	unblockable fadeaway jumper	spring-loaded sneakers	left-handed shooter	sparkly star headband	gets tired during fastbreaks
Paul George	unblockable fadeaway jumper	holographic shooting glasses	left-handed shooter	sparkly star headband	hates full-court press
Jimmy Butler	no-look bounce pass	spring-loaded sneakers	left-handed shooter	neon yellow headband	hates full-court press

CLUE 1 Rounding

We need to calculate the total team points across all four quarters, minus the free throws, to unlock the coach's digital playbook. This playbook contains our first clue about the Sneaker Bandit's gear.

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

T			T											T				
900	7000	700	900	7000	290	700	90	2300	9000	700	110	370	9000	900	300	110	700	200
110	300	50	700	2900	500	9000	300	370	430	700	500	200	3700	3700				

Round 868 to the nearest hundred → **T**

Round 271 to the nearest hundred → **U**

Round 428 to the nearest ten → **C**

Round 207 to the nearest hundred → **A**

Round 8,992 to the nearest thousand → **O**

Round 53 to the nearest ten → **P**

Round 6,885 to the nearest thousand → **H**

Round 90 to the nearest ten → **F**

Round 745 to the nearest hundred → **E**

Round 2,851 to the nearest hundred → **R**

Round 3,749 to the nearest hundred → **L**

Round 369 to the nearest ten → **N**

Round 478 to the nearest hundred → **B**

Round 2,259 to the nearest hundred → **D**

Round 108 to the nearest ten → **S**

Round 289 to the nearest ten → **I**

Scratch space:

CLUE 2

Multi-step word problems

The speed radar caught the bandit running past the concession stand. The radar screen is cracked and only displays speeds rounded to the nearest ten, but we can use this estimate to reveal the culprit's shooting hand.

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

A witness saw the villain was

L							D		D	S		O	O			R
78	16	37	52	26	62	21		16		26		52	16			

There were 176 whistles in all. 2 All-Star Squad used 10 whistles each. The other 2 All-Star Squad shared the rest equally. How many whistles did each of the other All-Star Squad get?

Answer: → **L**

Coach collected 10 whistles in the morning and 32 whistles in the afternoon, then split them equally among 2 All-Star Squad. How many whistles did each get?

Answer: → **N**

There were 176 sneakers in all. 32 sneakers were set aside. The rest were shared equally among 9 All-Star Squad. How many sneakers did each get?

Answer: → **E**

There were 147 jersey shirts in all. 4 All-Star Squad used 9 jersey shirts each. The other 3 All-Star Squad shared the rest equally. How many jersey shirts did each of the other All-Star Squad get?

Answer: → **F**

There were 258 jersey shirts in all. 3 All-Star Squad used 24 jersey shirts each. The other 3 All-Star Squad shared the rest equally. How many jersey shirts did each of the other All-Star Squad get?

Answer: → **A**

There were 212 whistles in all. 4 whistles were set aside. The rest were shared equally among 4 All-Star Squad. How many whistles did each get?

Answer: → **T**

There were 198 jersey shirts in all. 3 All-Star Squad used 40 jersey shirts each. The other 3 All-Star Squad shared the rest equally. How many jersey shirts did each of the other All-Star Squad get?

Answer: → **H**

Scratch space:

CLUE 3 Addition

Let us total up all the practice jerseys left in the laundry bins. Combining the home and away jerseys will give us the passcode to read the security guard's defensive notes.

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

T			T														
7582	7040	3126	7582	7040	2292	3126	3579	8397	2169	7793	2292	8818	8039	3126	8767		
						T											T
8767	5684	8552	2292	7793	5030	7582	7040	3126	3579	5684	6814	6814	8818	9718	5684	8552	7582
8397	8552	3126	5116	5116													

$4332 + 3250 = \square \rightarrow \text{T}$	$4901 + 2892 = \square \rightarrow \text{N}$	$1953 + 1173 = \square \rightarrow \text{E}$
$3107 + 2009 = \square \rightarrow \text{S}$	$3428 + 4611 = \square \rightarrow \text{K}$	$5882 + 3836 = \square \rightarrow \text{O}$
$1085 + 1084 = \square \rightarrow \text{A}$	$4835 + 3562 = \square \rightarrow \text{P}$	$1602 + 690 = \square \rightarrow \text{I}$
$3737 + 1947 = \square \rightarrow \text{U}$	$2302 + 4512 = \square \rightarrow \text{L}$	$3868 + 3172 = \square \rightarrow \text{H}$
$1602 + 1977 = \square \rightarrow \text{F}$	$3133 + 5634 = \square \rightarrow \text{D}$	$5604 + 2948 = \square \rightarrow \text{R}$
$4540 + 4278 = \square \rightarrow \text{C}$	$3091 + 1939 = \square \rightarrow \text{G}$	

Scratch space:

CLUE 4
Subtraction

The team statistician noticed some basketballs are missing from the equipment rack. Subtracting the remaining balls from the original inventory will open the locker where the bandit dropped their headband.

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

A															A	
8319	3007	7004	2719	3007	7692	7004	7360	7360	2719	5867	6142	8597	8125	7004	8319	8819

	A				A												
5867	8319	6128	6128	3007	8319	4626	4626	7004	8819	2719	3007	6142	8597	7004	3007	7004	6142

$10257 - 1938 = \square \rightarrow \text{A}$

$10677 - 1858 = \square \rightarrow \text{D}$

$11492 - 3367 = \square \rightarrow \text{R}$

$8214 - 522 = \square \rightarrow \text{Y}$

$12147 - 4787 = \square \rightarrow \text{L}$

$6715 - 587 = \square \rightarrow \text{S}$

$10326 - 1729 = \square \rightarrow \text{H}$

$8572 - 2705 = \square \rightarrow \text{W}$

$8121 - 1979 = \square \rightarrow \text{T}$

$11895 - 4891 = \square \rightarrow \text{E}$

$6098 - 3091 = \square \rightarrow \text{N}$

$8258 - 3632 = \square \rightarrow \text{G}$

$6315 - 3596 = \square \rightarrow \text{O}$

Scratch space:

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

To figure out how the suspect escaped, we must divide the leftover energy drinks equally among the starting lineup. Solving this fair-share problem unlocks the final security footage.

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:

$10 \div 10 = \boxed{}$

$12 \div 6 = \boxed{}$

$33 \div 11 = \boxed{}$

$32 \div 8 = \boxed{}$

$36 \div 3 = \boxed{}$

$77 \div 7 = \boxed{}$

$27 \div 3 = \boxed{}$

$40 \div 5 = \boxed{}$

$20 \div 4 = \boxed{}$

$40 \div 4 = \boxed{}$

$60 \div 10 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain zips a sneaky no-look pass to a shadow, then scans the exits using holographic shooting glasses.
2. The villain zips a sneaky no-look pass to a shadow, then flees using spring-loaded sneakers.
3. The villain soars into the air for a rim-rattling dunk, then flees using spring-loaded sneakers.
4. The villain soars into the air for a rim-rattling dunk, then scans the exits using holographic shooting glasses.
5. The villain dribbles through the defense at light speed, then swipes the championship trophy with sticky gloves.
6. The villain fades backward to hit a perfect jump shot, then scans the exits using holographic shooting glasses.
7. The villain zips a sneaky no-look pass to a shadow, then checks their escape time on a weighted wrist tracker.
8. The villain soars into the air for a rim-rattling dunk, then checks their escape time on a weighted wrist tracker.
9. The villain soars into the air for a rim-rattling dunk, then swipes the championship trophy with sticky gloves.
10. The villain dribbles through the defense at light speed, then escapes by bouncing away on a super-bounce ball.
11. The villain fades backward to hit a perfect jump shot, then escapes by bouncing away on a super-bounce ball.
12. The villain fades backward to hit a perfect jump shot, then swipes the championship trophy with sticky gloves.

Answer Key

The Mystery of the Missing Championship Ball

Culprit: James Harden

no-look bounce pass · weighted wrist tracker · left-handed shooter · neon yellow headband · hates full-court press

Trail: Start 21 → Clue 1 17 → Clue 2 12 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE THIEF DOES NOT USE A SUPER BOUNCE BALL"

Round 868 to the nearest hundred = 900 (T) · Round 271 to the nearest hundred = 300 (U) · Round 428 to the nearest ten = 430 (C) · Round 207 to the nearest hundred = 200 (A) · Round 8,992 to the nearest thousand = 9000 (O) · Round 53 to the nearest ten = 50 (P) · Round 6,885 to the nearest thousand = 7000 (H) · Round 90 to the nearest ten = 90 (F) · Round 745 to the nearest hundred = 700 (E) · Round 2,851 to the nearest hundred = 2900 (R) · Round 3,749 to the nearest hundred = 3700 (L) · Round 369 to the nearest ten = 370 (N) · Round 478 to the nearest hundred = 500 (B) · Round 2,259 to the nearest hundred = 2300 (D) · Round 108 to the nearest ten = 110 (S) · Round 289 to the nearest ten = 290 (I)

Clue 2 (Multi-step word problems): "LEFT HANDED SHOOTER"

There were 176 whistles in all. 2 All-Star Squad used 10 whistles each. The other 2 All-Star Squad shared the rest equally. How many whistles did each of the other All-Star Squad get? = 78 (L) · Coach collected 10 whistles in the morning and 32 whistles in the afternoon, then split them equally among 2 All-Star Squad. How many whistles did each get? = 21 (N) · There were 176 sneakers in all. 32 sneakers were set aside. The rest were shared equally among 9 All-Star Squad. How many sneakers did each get? = 16 (E) · There were 147 jersey shirts in all. 4 All-Star Squad used 9 jersey shirts each. The other 3 All-Star Squad shared the rest equally. How many jersey shirts did each of the other All-Star Squad get? = 37 (F) · There were 258 jersey shirts in all. 3 All-Star Squad used 24 jersey shirts each. The other 3 All-Star Squad shared the rest equally. How many jersey shirts did each of the other All-Star Squad get? = 62 (A) · There were 212 whistles in all. 4 whistles were set aside. The rest were shared equally among 4 All-Star Squad. How many whistles did each get? = 52 (T) · There were 198 jersey shirts in all. 3 All-Star Squad used 40 jersey shirts each. The other 3 All-Star Squad shared the rest equally. How many jersey shirts did each of the other All-Star Squad get? = 26 (H)

Clue 3 (Addition): "THE THIEF PANICKED DURING THE FULL COURT PRESS"

$4332 + 3250 = 7582$ (T) · $4901 + 2892 = 7793$ (N) · $1953 + 1173 = 3126$ (E) · $3107 + 2009 = 5116$ (S) · $3428 + 4611 = 8039$ (K) · $5882 + 3836 = 9718$ (O) · $1085 + 1084 = 2169$ (A) · $4835 + 3562 = 8397$ (P) · $1602 + 690 = 2292$ (I) · $3737 + 1947 = 5684$ (U) · $2302 + 4512 = 6814$ (L) · $3868 + 3172 = 7040$ (H) · $1602 + 1977 = 3579$ (F) · $3133 + 5634 = 8767$ (D) · $5604 + 2948 = 8552$ (R) · $4540 + 4278 = 8818$ (C) · $3091 + 1939 = 5030$ (G)

Clue 4 (Subtraction): "A NEON YELLOW THREAD WAS SNAGGED ON THE NET"

$10257 - 1938 = 8319$ (A) · $10677 - 1858 = 8819$ (D) · $11492 - 3367 = 8125$ (R) · $8214 - 522 = 7692$ (Y) · $12147 - 4787 = 7360$ (L) · $6715 - 587 = 6128$ (S) · $10326 - 1729 = 8597$ (H) · $8572 - 2705 = 5867$ (W) · $8121 - 1979 = 6142$ (T) · $11895 - 4891 = 7004$ (E) · $6098 - 3091 = 3007$ (N) · $8258 - 3632 = 4626$ (G) · $6315 - 3596 = 2719$ (O)

Clue 5 (Division facts (1-12)): surviving statement is box 7 → James Harden

$10 \div 10 = 1$ · $12 \div 6 = 2$ · $33 \div 11 = 3$ · $32 \div 8 = 4$ · $36 \div 3 = 12$ · $77 \div 7 = 11$ · $27 \div 3 = 9$ · $40 \div 5 = 8$ · $20 \div 4 = 5$ · $40 \div 4 = 10$ · $60 \div 10 = 6$