



The Mystery of the Missing Championship Hoops

Grade 5 math · Place value, Multiplication, Rounding, Fractions of a number, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

Right before the final whistle of the championship tournament, someone snuck into the arena equipment vault and made off with the golden game ball! The detective team must examine the court clues, analyze the missing items, and figure out which legendary player turned into the Gear Bandit.

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 Gear 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 GEAR	BACKUP TOOL	SHOOTING HAND	LACE COLOR	DEFENSIVE FLAW
Chiney Ogwumike	Grip Gel Sneaker	Chalk Bag	Left Handed Shooter	Bright Green Laces	Slippery Floor
Jewell Loyd	Grip Gel Sneaker	Water Bottle	Left Handed Shooter	Electric Blue Laces	Squeaky Shoes
Aja Wilson	Heavy Duty Net	Towel Ring	Left Handed Shooter	Electric Blue Laces	Slippery Floor
Kelsey Plum	Grip Gel Sneaker	Pump Needle	Left Handed Shooter	Bright Green Laces	Slippery Floor
Tamika Catchings	High Bounce Ball	Whistle Lanyard	Right Handed Shooter	Bright Green Laces	Squeaky Shoes
Sabrina Ionescu	High Bounce Ball	Water Bottle	Right Handed Shooter	Bright Green Laces	Loose Rim
Chelsea Gray	Grip Gel Sneaker	Towel Ring	Right Handed Shooter	Bright Green Laces	Loose Rim
Sheryl Swoopes	Padded Wristband	Water Bottle	Left Handed Shooter	Bright Green Laces	Slippery Floor
Tina Charles	High Bounce Ball	Chalk Bag	Right Handed Shooter	Electric Blue Laces	Squeaky Shoes
Jonquel Jones	Heavy Duty Net	Water Bottle	Left Handed Shooter	Neon Orange Laces	Loose Rim
Candace Parker	Grip Tape Roll	Towel Ring	Left Handed Shooter	Electric Blue Laces	Loose Rim
Diana Taurasi	High Bounce Ball	Whistle Lanyard	Right Handed Shooter	Electric Blue Laces	Squeaky Shoes
Napheesa Collier	Padded Wristband	Water Bottle	Right Handed Shooter	Electric Blue Laces	Loose Rim
Sylvia Fowles	Padded Wristband	Whistle Lanyard	Left Handed Shooter	Bright Green Laces	Slippery Floor
Breanna Stewart	Padded Wristband	Chalk Bag	Left Handed Shooter	Neon Orange Laces	Squeaky Shoes
Elena Delle Donne	High Bounce Ball	Whistle Lanyard	Right Handed Shooter	Bright Green Laces	Slippery Floor
Brittney Griner	High Bounce Ball	Pump Needle	Left Handed Shooter	Bright Green Laces	Squeaky Shoes
Lisa Leslie	Grip Gel Sneaker	Water Bottle	Left Handed Shooter	Bright Green Laces	Slippery Floor
Sue Bird	Heavy Duty Net	Whistle Lanyard	Left Handed Shooter	Electric Blue Laces	Squeaky Shoes
Arike Ogunbowale	Grip Gel Sneaker	Pump Needle	Left Handed Shooter	Electric Blue Laces	Slippery Floor
Alyssa Thomas	Grip Gel Sneaker	Chalk Bag	Left Handed Shooter	Electric Blue Laces	Loose Rim

CLUE 1

The security terminal required analyzing the digit positions on the equipment locker lock.

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

A number line from 0 to 10,000 with various numbers marked in boxes. The numbers are: 900, 300, 400, 500, 3000, 500, 50, 400, 80, 900, 800, 9000, 400, 500, 200, 9000, 900. The first 900 and the 900 at the end are highlighted in orange and labeled with a 'T'.



? → **H**

? $\rightarrow$ U

? → **K**

? → **G**

A diagram consisting of a rectangular box on the left, followed by a right-pointing arrow, and then another rectangular box on the right containing the letter 'R'.

? → **S**

? → **A**

A diagram showing a box with a question mark mapping to a box with the letter O.

→ **B**

→ **E**

? → **D**

Scratch space:

CLUE 2

Multiplication facts (1-12)

Analyzing the rack arrangement required multiplying rows of basketball gear to find total stock.

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

T									T								T
9	2	1	120	30	120	64	1	100	9	12	99	120	99	36	1	3	9

										T		
2	99	88	6	1	6	120	2	81	81	9	1	121

$9 \times 1 = \square \rightarrow \boxed{\text{T}}$

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

$2 \times 1 = \square \rightarrow \boxed{\text{H}}$

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

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

$12 \times 3 = \square \rightarrow \boxed{\text{L}}$

$8 \times 11 = \square \rightarrow \boxed{\text{N}}$

$8 \times 8 = \square \rightarrow \boxed{\text{P}}$

$11 \times 9 = \square \rightarrow \boxed{\text{A}}$

$2 \times 3 = \square \rightarrow \boxed{\text{D}}$

$11 \times 11 = \square \rightarrow \boxed{\text{R}}$

$2 \times 6 = \square \rightarrow \boxed{\text{W}}$

$10 \times 10 = \square \rightarrow \boxed{\text{C}}$

$5 \times 6 = \square \rightarrow \boxed{\text{U}}$

$10 \times 12 = \square \rightarrow \boxed{\text{S}}$

Scratch space:

Rounding

The digital scoreboard clock rounded off the exact seconds of the locker room intrusion.

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

Number	Frequency
9000	1100
2900	2000
290	90
900	2900
300	3000
300	2900
90	300
70	90
110	30
4300	1100
290	50
5000	5000
5000	200
70	370
2900	
290	
5000	
200	
90	
50	

Round 9,340 to the nearest thousand → **A**

Round 923 to the nearest hundred $\rightarrow$

1

Round 2,356 to the nearest thousand $\rightarrow$ **H**

Round 292 to the nearest ten $\rightarrow$ **L**

Round 326 to the nearest hundred $\rightarrow$ **P**

Round 4,345 to the nearest hundred → **F**

Round 70 to the nearest ten $\rightarrow$ **R**

Round 2,955 to the nearest thousand $\rightarrow$ **U**

Round 2,889 to the nearest hundred → **S**

Round 30 to the nearest ten → **C**

Round 4,678 to the nearest thousand $\rightarrow$

Round 94 to the nearest ten $\rightarrow$ **E**

Round 111 to the nearest ten $\rightarrow$ **Y**

Round 176 to the nearest hundred $\rightarrow$ **W**

Round 49 to the nearest ten $\rightarrow$ **D**

Round 373 to the nearest ten $\rightarrow$ **N**

Round 1,102 to the nearest hundred → **T**

Scratch space:

CLUE 4

Fractions of a number

The equipment audit required finding fractions of the total inventory logged before halftime.

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

B																			
22	7	11	17	6	39	17	7	16	16	30	33	20	2	16	4	23	16	7	16

33	16	26	39	32	30	20	33	32	2	21	16	7	

$4/8 \text{ of } 44 = \square \rightarrow \text{B}$

$5/10 \text{ of } 8 = \square \rightarrow \text{S}$

$5/10 \text{ of } 46 = \square \rightarrow \text{W}$

$4/5 \text{ of } 40 = \square \rightarrow \text{O}$

$1/6 \text{ of } 36 = \square \rightarrow \text{H}$

$4/10 \text{ of } 40 = \square \rightarrow \text{E}$

$2/8 \text{ of } 104 = \square \rightarrow \text{F}$

$1/6 \text{ of } 66 = \square \rightarrow \text{I}$

$3/8 \text{ of } 80 = \square \rightarrow \text{N}$

$4/5 \text{ of } 25 = \square \rightarrow \text{A}$

$1/8 \text{ of } 16 = \square \rightarrow \text{C}$

$2/6 \text{ of } 51 = \square \rightarrow \text{G}$

$1/2 \text{ of } 78 = \square \rightarrow \text{T}$

$1/4 \text{ of } 28 = \square \rightarrow \text{R}$

$2/8 \text{ of } 84 = \square \rightarrow \text{K}$

$3/4 \text{ of } 44 = \square \rightarrow \text{L}$

Scratch space:

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

Splitting the remaining practice jerseys equally among training stations yielded a key 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:

$40 \div 4 = \boxed{}$

$3 \div 1 = \boxed{}$

$12 \div 3 = \boxed{}$

$16 \div 8 = \boxed{}$

$72 \div 12 = \boxed{}$

$81 \div 9 = \boxed{}$

$120 \div 10 = \boxed{}$

$35 \div 5 = \boxed{}$

$44 \div 4 = \boxed{}$

$12 \div 12 = \boxed{}$

$32 \div 4 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain wrapped the door handles with a grip tape roll, then dusted the lockers with a chalk bag.
2. The villain escaped the arena on a high bounce ball, then snagged the key with a towel ring.
3. The villain swiped the trophy with a grip gel sneaker, then jammed the lock using a pump needle.
4. The villain swiped the trophy with a grip gel sneaker, then spilled liquid from a water bottle.
5. The villain battered the lock with a padded wristband, then blew a sharp whistle lanyard.
6. The villain wrapped the door handles with a grip tape roll, then snagged the key with a towel ring.
7. The villain swiped the trophy with a grip gel sneaker, then snagged the key with a towel ring.
8. The villain trapped the guard in a heavy duty net, then blew a sharp whistle lanyard.
9. The villain wrapped the door handles with a grip tape roll, then blew a sharp whistle lanyard.
10. The villain battered the lock with a padded wristband, then spilled liquid from a water bottle.
11. The villain battered the lock with a padded wristband, then jammed the lock using a pump needle.
12. The villain battered the lock with a padded wristband, then snagged the key with a towel ring.

Answer Key

The Mystery of the Missing Championship Hoops

Culprit: Sylvia Fowles

Padded Wristband · Whistle Lanyard · Left Handed Shooter · Bright Green Laces · Slippery Floor

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE SUSPECT DOES NOT CARRY A CHALK BAG"

What is the value of the 9 in 71,953? = 900 (T) · What is the value of the 2 in 602,078? = 2000 (Y) · What is the value of the 3 in 480,350? = 300 (H) · What is the value of the 3 in 293,088? = 3000 (U) · What is the value of the 6 in 543,617? = 600 (K) · What is the value of the 1 in 982,100? = 100 (G) · What is the value of the 2 in 13,523? = 20 (R) · What is the value of the 8 in 322,584? = 80 (C) · What is the value of the 5 in 378,574? = 500 (S) · What is the value of the 7 in 229,759? = 700 (A) · What is the value of the 7 in 57,124? = 7000 (L) · What is the value of the 2 in 30,251? = 200 (N) · What is the value of the 9 in 19,014? = 9000 (O) · What is the value of the 5 in 95,397? = 5000 (B) · What is the value of the 5 in 47,852? = 50 (P) · What is the value of the 4 in 11,478? = 400 (E) · What is the value of the 8 in 940,866? = 800 (D)

Clue 2 (Multiplication facts (1-12)): "THE SUSPECT WAS A LEFT HANDED SHOOTER"

$9 \times 1 = 9$ (T) · $3 \times 1 = 3$ (F) · $2 \times 1 = 2$ (H) · $9 \times 9 = 81$ (O) · $1 \times 1 = 1$ (E) · $12 \times 3 = 36$ (L) · $8 \times 11 = 88$ (N) · $8 \times 8 = 64$ (P) · $11 \times 9 = 99$ (A) · $2 \times 3 = 6$ (D) · $11 \times 11 = 121$ (R) · $2 \times 6 = 12$ (W) · $10 \times 10 = 100$ (C) · $5 \times 6 = 30$ (U) · $10 \times 12 = 120$ (S)

Clue 3 (Rounding): "A SLIPPERY FLOOR SLOWED THE SUSPECT DOWN"

Round 9,340 to the nearest thousand = 9000 (A) · Round 923 to the nearest hundred = 900 (I) · Round 2,356 to the nearest thousand = 2000 (H) · Round 292 to the nearest ten = 290 (L) · Round 326 to the nearest hundred = 300 (P) · Round 4,345 to the nearest hundred = 4300 (F) · Round 70 to the nearest ten = 70 (R) · Round 2,955 to the nearest thousand = 3000 (U) · Round 2,889 to the nearest hundred = 2900 (S) · Round 30 to the nearest ten = 30 (C) · Round 4,678 to the nearest thousand = 5000 (O) · Round 94 to the nearest ten = 90 (E) · Round 111 to the nearest ten = 110 (Y) · Round 176 to the nearest hundred = 200 (W) · Round 49 to the nearest ten = 50 (D) · Round 373 to the nearest ten = 370 (N) · Round 1,102 to the nearest hundred = 1100 (T)

Clue 4 (Fractions of a number): "BRIGHT GREEN LACES WERE LEFT ON A LOCKER"

$\frac{4}{8}$ of 44 = 22 (B) · $\frac{5}{10}$ of 8 = 4 (S) · $\frac{5}{10}$ of 46 = 23 (W) · $\frac{4}{5}$ of 40 = 32 (O) · $\frac{1}{6}$ of 36 = 6 (H) · $\frac{4}{10}$ of 40 = 16 (E) · $\frac{2}{8}$ of 104 = 26 (F) · $\frac{1}{6}$ of 66 = 11 (I) · $\frac{3}{8}$ of 80 = 30 (N) · $\frac{4}{5}$ of 25 = 20 (A) · $\frac{1}{8}$ of 16 = 2 (C) · $\frac{2}{6}$ of 51 = 17 (G) · $\frac{1}{2}$ of 78 = 39 (T) · $\frac{1}{4}$ of 28 = 7 (R) · $\frac{2}{8}$ of 84 = 21 (K) · $\frac{3}{4}$ of 44 = 33 (L)

Clue 5 (Division facts (1-12)): surviving statement is box 5 → Sylvia Fowles

$40 \div 4 = 10$ · $3 \div 1 = 3$ · $12 \div 3 = 4$ · $16 \div 8 = 2$ · $72 \div 12 = 6$ · $81 \div 9 = 9$ · $120 \div 10 = 12$ · $35 \div 5 = 7$ · $44 \div 4 = 11$ · $12 \div 12 = 1$ · $32 \div 4 = 8$