



The Case of the Missing Championship Cup

Grade 6 math · Place value, Word problems, Multi-step word problems, Multiplication, Missing addends · Reading level grades 5-6

Detective: _____ Date: _____

Just before the opening ceremony, someone snuck into the trophy room and snatched the golden Championship Cup! The Head Referee is panicking. All twenty-four elite athletes in the tournament are suspects. We must analyze the sports gear, training schedules, and court-side clues to track down the thief before the final whistle blows!

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 rogue athlete 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	DOMINANT HAND	HEADBAND COLOR	PET PEEVE
Cristiano Ronaldo	backhand smash	neon high-tops	right-handed play	red headband	bright flashbulbs
Stephen Curry	curving free kick	golden whistle	left-handed play	red headband	squeaky sneakers
Simone Biles	high jump	grip-tech gloves	left-handed play	green headband	loud airhorns
Coco Gauff	backhand smash	grip-tech gloves	left-handed play	blue headband	bright flashbulbs
Luka Doncic	three-point shot	weighted wristbands	left-handed play	blue headband	loud airhorns
Lionel Messi	hundred meter sprint	weighted wristbands	left-handed play	green headband	loud airhorns
Alex Morgan	curving free kick	titanium racket	left-handed play	red headband	loud airhorns
Patrick Mahomes	three-point shot	titanium racket	left-handed play	green headband	loud airhorns
Sunisa Lee	hundred meter sprint	neon high-tops	right-handed play	red headband	squeaky sneakers
Naomi Osaka	backhand smash	weighted wristbands	left-handed play	blue headband	loud airhorns
Travis Kelce	backhand smash	titanium racket	left-handed play	red headband	loud airhorns
Katie Ledecky	backhand smash	weighted wristbands	left-handed play	red headband	loud airhorns
Serena Williams	high jump	grip-tech gloves	right-handed play	red headband	loud airhorns
LeBron James	three-point shot	neon high-tops	right-handed play	blue headband	bright flashbulbs
Roger Federer	curving free kick	titanium racket	right-handed play	blue headband	bright flashbulbs
Giannis Antetokounmpo	three-point shot	grip-tech gloves	left-handed play	red headband	squeaky sneakers
Megan Rapinoe	high jump	golden whistle	left-handed play	red headband	loud airhorns
Usain Bolt	curving free kick	neon high-tops	left-handed play	red headband	loud airhorns
Caitlin Clark	three-point shot	weighted wristbands	right-handed play	green headband	squeaky sneakers
Sha'Carri Richardson	backhand smash	neon high-tops	left-handed play	blue headband	bright flashbulbs
Michael Phelps	high jump	titanium racket	left-handed play	red headband	bright flashbulbs

CLUE 1 Place value

Coach Morrison needs to balance the team budget for new gear. By calculating the cost of jerseys and subtracting our sponsor discount, we can unlock the security office lockbox.

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

T							T									T
80	600	9000	2000	20	2000	500	9000	40	80	6000	5000	9000	2000	60	5000	80
			T											T		
5000	3000	60	80	600	9000	8000	5000	30	6000	9000	60	3000	600	70	2000	80
															30	9000

What is the value of the 8 in 12,486? →

T

What is the value of the 6 in 573,269? →

N

What is the value of the 5 in 978,570? →

P

What is the value of the 2 in 565,927? →

U

What is the value of the 4 in 22,543? →

C

What is the value of the 7 in 231,278? →

I

What is the value of the 8 in 68,742? →

G

What is the value of the 6 in 482,692? →

H

What is the value of the 5 in 135,676? →

O

What is the value of the 9 in 19,722? →

E

What is the value of the 3 in 682,732? →

L

What is the value of the 3 in 43,144? →

W

What is the value of the 2 in 482,666? →

S

What is the value of the 6 in 556,595? →

D

Scratch space:

CLUE 2

Word problems

The field crew needs to find out exactly how many gallons of sports drink are left in the storage coolers before the prime-time game begins.

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 P L Y .

91
50
37
99
107
73
18
50
91
73

There were 131 sports bottles. 40 were used up. How many sports bottles are left?

Answer: → L

Coach Morrison lined up 5 rows of 10 practice cones. How many practice cones in all?

Answer: → E

There were 55 practice cones. 18 were used up. How many practice cones are left?

Answer: → F

Coach Morrison lined up 11 rows of 9 practice cones. How many practice cones in all?

Answer: → T

Coach Morrison lined up 2 rows of 9 tennis balls. How many tennis balls in all?

Answer: → N

There were 90 gold medals. 17 were used up. How many gold medals are left?

Answer: → A

Coach Morrison found 32 sports bottles yesterday and 75 more today. How many sports bottles in all?

Answer: → H

Scratch space:

CLUE 3

Multi-step word problems

The giant electronic scoreboard is flashing random numbers! We must identify the digit in the hundreds place of the ticket sale count to reset the main system.

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

Someone scared the villain off with L H N S .

60 86 54 62 55 87 14 86 14

Coach Morrison filled 6 boxes with 4 tennis balls each, then found 36 more tennis balls. How many tennis balls are there in all?

Answer: → L

Coach Morrison filled 8 boxes with 6 practice cones each, then found 6 more practice cones. How many practice cones are there in all?

Answer: → U

There were 65 sports bottles in all. 23 sports bottles were set aside. The rest were shared equally among 3 The All-Stars. How many sports bottles did each get?

Answer: → R

Coach Morrison filled 4 boxes with 5 practice cones each, then found 42 more practice cones. How many practice cones are there in all?

Answer: → D

Coach Morrison collected 66 sports bottles in the morning and 108 sports bottles in the afternoon, then split them equally among 2 The All-Stars. How many sports bottles did each get?

Answer: → I

There were 230 stopwatches in all. 4 The All-Stars used 30 stopwatches each. The other 2 The All-Stars shared the rest equally. How many stopwatches did each of the other The All-Stars get?

Answer: → A

There were 466 stopwatches in all. 36 stopwatches were set aside. The rest were shared equally among 5 The All-Stars. How many stopwatches did each get?

Answer: → O

Scratch space:

CLUE 4

Multiplication facts (1-12)

The equipment manager stacked the new tennis ball cans in equal rows. Multiplying the rows by the balls per container will reveal the locker combination.

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

A				A									A				A		
144	49	60	9	144	56	48	6	11	9	5	48	54	144	121	9	45	144	49	
							A			A									
6	56	60	54	5	54	5	144	48	24	144	56	48							

$12 \times 12 = \square \rightarrow \boxed{\text{A}}$

$9 \times 6 = \square \rightarrow \boxed{\text{H}}$

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

$6 \times 4 = \square \rightarrow \boxed{\text{B}}$

$9 \times 5 = \square \rightarrow \boxed{\text{W}}$

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

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

$7 \times 8 = \square \rightarrow \boxed{\text{N}}$

$10 \times 6 = \square \rightarrow \boxed{\text{T}}$

$1 \times 11 = \square \rightarrow \boxed{\text{F}}$

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

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

$6 \times 8 = \square \rightarrow \boxed{\text{D}}$

Scratch space:

CLUE 5**Missing addends - the last clue**

A box of gold medals is missing some prizes. We must figure out how many more we need to reach our target of fifty medals to open the locker room safe.

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:

$12 + \underline{\quad} = 22$

$21 + \underline{\quad} = 28$

$35 + \underline{\quad} = 47$

$7 + \underline{\quad} = 13$

$6 + \underline{\quad} = 9$

$15 + \underline{\quad} = 16$

$29 + \underline{\quad} = 33$

$16 + \underline{\quad} = 25$

$18 + \underline{\quad} = 23$

$35 + \underline{\quad} = 46$

$39 + \underline{\quad} = 47$

Step 2 - cross out the sentence with each answer:

1. The villain sprints down the stadium hallway, then leaves behind sweaty grip-tech gloves.
2. The villain kicks a soccer ball through the skylight, then escapes in flashing neon high-tops.
3. The villain sprints down the stadium hallway, then escapes in flashing neon high-tops.
4. The villain leaps over the security gate, then drops heavy weighted wristbands.
5. The villain kicks a soccer ball through the skylight, then leaves behind sweaty grip-tech gloves.
6. The villain smashes a tennis ball into the alarm button, then blows a loud golden whistle.
7. The villain smashes a tennis ball into the alarm button, then zips away with a titanium racket.
8. The villain sprints down the stadium hallway, then zips away with a titanium racket.
9. The villain scores a basket to distract the guards, then zips away with a titanium racket.
10. The villain smashes a tennis ball into the alarm button, then drops heavy weighted wristbands.
11. The villain smashes a tennis ball into the alarm button, then leaves behind sweaty grip-tech gloves.
12. The villain kicks a soccer ball through the skylight, then zips away with a titanium racket.

Answer Key

The Case of the Missing Championship Cup

Culprit: Usain Bolt

curving free kick · neon high-tops · left-handed play · red headband · loud airhorns

Trail: Start 21 → Clue 1 19 → Clue 2 13 → Clue 3 9 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE SUSPECT DOES NOT OWN THE GOLDEN WHISTLE"

What is the value of the 8 in 12,486? = 80 (T) · What is the value of the 6 in 573,269? = 60 (N) · What is the value of the 5 in 978,570? = 500 (P) · What is the value of the 2 in 565,927? = 20 (U) · What is the value of the 4 in 22,543? = 40 (C) · What is the value of the 7 in 231,278? = 70 (I) · What is the value of the 8 in 68,742? = 8000 (G) · What is the value of the 6 in 482,692? = 600 (H) · What is the value of the 5 in 135,676? = 5000 (O) · What is the value of the 9 in 19,722? = 9000 (E) · What is the value of the 3 in 682,732? = 30 (L) · What is the value of the 3 in 43,144? = 3000 (W) · What is the value of the 2 in 482,666? = 2000 (S) · What is the value of the 6 in 556,595? = 6000 (D)

Clue 2 (Word problems): "LEFT HANDED PLAY"

There were 131 sports bottles. 40 were used up. How many sports bottles are left? = 91 (L) · Coach Morrison lined up 5 rows of 10 practice cones. How many practice cones in all? = 50 (E) · There were 55 practice cones. 18 were used up. How many practice cones are left? = 37 (F) · Coach Morrison lined up 11 rows of 9 practice cones. How many practice cones in all? = 99 (T) · Coach Morrison lined up 2 rows of 9 tennis balls. How many tennis balls in all? = 18 (N) · There were 90 gold medals. 17 were used up. How many gold medals are left? = 73 (A) · Coach Morrison found 32 sports bottles yesterday and 75 more today. How many sports bottles in all? = 107 (H)

Clue 3 (Multi-step word problems): "LOUD AIRHORNS"

Coach Morrison filled 6 boxes with 4 tennis balls each, then found 36 more tennis balls. How many tennis balls are there in all? = 60 (L) · Coach Morrison filled 8 boxes with 6 practice cones each, then found 6 more practice cones. How many practice cones are there in all? = 54 (U) · There were 65 sports bottles in all. 23 sports bottles were set aside. The rest were shared equally among 3 The All-Stars. How many sports bottles did each get? = 14 (R) · Coach Morrison filled 4 boxes with 5 practice cones each, then found 42 more practice cones. How many practice cones are there in all? = 62 (D) · Coach Morrison collected 66 sports bottles in the morning and 108 sports bottles in the afternoon, then split them equally among 2 The All-Stars. How many sports bottles did each get? = 87 (I) · There were 230 stopwatches in all. 4 The All-Stars used 30 stopwatches each. The other 2 The All-Stars shared the rest equally. How many stopwatches did each of the other The All-Stars get? = 55 (A) · There were 466 stopwatches in all. 36 stopwatches were set aside. The rest were shared equally among 5 The All-Stars. How many stopwatches did each get? = 86 (O)

Clue 4 (Multiplication facts (1-12)): "A STRAND OF RED HAIR WAS ON THE HEADBAND"

$12 \times 12 = 144$ (A) · $9 \times 6 = 54$ (H) · $7 \times 7 = 49$ (S) · $6 \times 4 = 24$ (B) · $9 \times 5 = 45$ (W) · $2 \times 3 = 6$ (O) · $1 \times 9 = 9$ (R) · $7 \times 8 = 56$ (N) · $10 \times 6 = 60$ (T) · $1 \times 11 = 11$ (F) · $5 \times 1 = 5$ (E) · $11 \times 11 = 121$ (I) · $6 \times 8 = 48$ (D)

Clue 5 (Missing addends): surviving statement is box 2 → Usain Bolt

$12 + \underline{\quad} = 22 = 10$ · $21 + \underline{\quad} = 28 = 7$ · $35 + \underline{\quad} = 47 = 12$ · $7 + \underline{\quad} = 13 = 6$ · $6 + \underline{\quad} = 9 = 3$ · $15 + \underline{\quad} = 16 = 1$ · $29 + \underline{\quad} = 33 = 4$ · $16 + \underline{\quad} = 25 = 9$ · $18 + \underline{\quad} = 23 = 5$ · $35 + \underline{\quad} = 46 = 11$ · $39 + \underline{\quad} = 47 = 8$