



The Golden Boot Mystery

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

Detective: _____ Date: _____

The shiny Golden Boot trophy has disappeared from the stadium display case right before the championship game! We must help the referee find the player who took it before the 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 Cleat Thief 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	KICKING FOOT	HEADBAND COLOR	DISTRACTION
Megan	knuckleball shot	neon laces	left footed	red headband	squeaky whistle
Leo	diving header	golden socks	right footed	blue headband	squeaky whistle
Sadio	diving header	striped wristband	right footed	green headband	muddy puddle
Alex	knuckleball shot	golden socks	right footed	red headband	muddy puddle
Cristiano	knuckleball shot	golden socks	left footed	red headband	orange slices
Zlatan	bicycle kick	starry captain band	left footed	green headband	muddy puddle
Christian	bicycle kick	shiny shin guards	right footed	red headband	squeaky whistle
Neymar	rainbow flick	shiny shin guards	right footed	green headband	muddy puddle
Son	bicycle kick	striped wristband	right footed	green headband	orange slices
Raheem	diving header	neon laces	right footed	green headband	muddy puddle
Kylian	bicycle kick	starry captain band	right footed	green headband	muddy puddle
Robert	power volley	starry captain band	left footed	blue headband	orange slices
Bukayo	bicycle kick	shiny shin guards	left footed	green headband	muddy puddle
Marta	bicycle kick	starry captain band	right footed	blue headband	muddy puddle
Luka	power volley	golden socks	left footed	red headband	muddy puddle
Karim	power volley	neon laces	left footed	blue headband	squeaky whistle
Kevin	knuckleball shot	starry captain band	right footed	green headband	muddy puddle
Mohamed	knuckleball shot	shiny shin guards	right footed	blue headband	orange slices
Virgil	knuckleball shot	neon laces	right footed	green headband	squeaky whistle
Harry	power volley	shiny shin guards	right footed	green headband	muddy puddle
Erling	power volley	starry captain band	left footed	red headband	squeaky whistle

CLUE 1 Addition

To find the first clue we must add up all the training soccer balls left in the equipment locker

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

T 7063	5505	2492	T 7063	5505	6163	2492	2759	5967	6250	2492	6188	3848	6250	T 7063	4634	2492	9842	8580
9842	6188	T 7063	9842	8580	8580	5627	4999	9842	3848	5967								

$3402 + 3661 = \square \rightarrow \boxed{\text{T}}$	$2344 + 3906 = \square \rightarrow \boxed{\text{O}}$	$3540 + 5040 = \square \rightarrow \boxed{\text{R}}$
$1589 + 903 = \square \rightarrow \boxed{\text{E}}$	$2062 + 2572 = \square \rightarrow \boxed{\text{W}}$	$1829 + 3798 = \square \rightarrow \boxed{\text{Y}}$
$1418 + 1341 = \square \rightarrow \boxed{\text{F}}$	$2076 + 2923 = \square \rightarrow \boxed{\text{B}}$	$5052 + 4790 = \square \rightarrow \boxed{\text{A}}$
$2509 + 3458 = \square \rightarrow \boxed{\text{D}}$	$2979 + 3209 = \square \rightarrow \boxed{\text{S}}$	$3709 + 2454 = \square \rightarrow \boxed{\text{I}}$
$3135 + 2370 = \square \rightarrow \boxed{\text{H}}$	$1384 + 2464 = \square \rightarrow \boxed{\text{N}}$	

Scratch space:

Multiplication facts (1-12)

The team jerseys are hanging in equal rows on the wall so let us multiply them to find the total

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

Diagram illustrating a sequence of boxes and numbers:

Top row: 14 boxes. The first box contains a red 'R'. Below the boxes are the numbers: 63, 88, 12, 25, 110, 3, 55, 55, 110, 24, 36, 1, 88, 121, 1.

Bottom row: 14 boxes. The second box contains a red 'R'. Below the boxes are the numbers: 90, 63, 88, 18, 110, 60, 16, 24, 63, 24, 88, 18, 110, 25, 24, 21, 30, 36.

$9 \times 7 = \boxed{} \rightarrow \boxed{\text{R}}$

$8 \times 11 = \boxed{} \rightarrow \boxed{I}$

$1 \times 1 = \boxed{} \rightarrow \boxed{\mathbf{K}}$

$9 \times 10 = \square \rightarrow \boxed{\text{P}}$

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

$11 \times 10 = \boxed{} \rightarrow \boxed{\text{T}}$

$6 \times 10 = \boxed{} \rightarrow \boxed{\text{S}}$

$6 \times 4 = \square \rightarrow \boxed{\mathbf{E}}$

$2 \times 8 = \square \rightarrow \boxed{W}$

$12 \times 3 = \square \rightarrow \boxed{\mathbf{D}}$

$5 \times 11 = \square \rightarrow \boxed{0}$

$3 \times 7 = \square \rightarrow \boxed{\mathbf{M}}$

$6 \times 3 = \square \rightarrow \boxed{\mathbf{N}}$

$5 \times 5 =$ $\rightarrow$ **H**

$4 \times 3 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

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

$3 \times 10 = \boxed{} \rightarrow \boxed{\text{U}}$

Scratch space:

CLUE 3

Rounding

The stadium radar clock is a bit broken and only shows ball speeds rounded to the nearest ten

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

T			T														
2300	4300	370	2300	4300	500	370	2000	430	300	500	30	30	370	900	500	290	9000
20	200	900	900	230	30	200	900	900	300	370							

Round 2,292 to the nearest hundred

→ T

Round 238 to the nearest hundred

→ U

Round 499 to the nearest hundred

→ I

Round 226 to the nearest ten

→ Y

Round 8,629 to the nearest thousand

→ A

Round 291 to the nearest ten

→ N

Round 16 to the nearest ten

→ M

Round 29 to the nearest ten

→ P

Round 1,987 to the nearest thousand

→ F

Round 943 to the nearest hundred

→ D

Round 427 to the nearest ten

→ S

Round 4,271 to the nearest hundred

→ H

Round 264 to the nearest hundred

→ L

Round 371 to the nearest ten

→ E

Scratch space:

CLUE 4 Place value

The stadium ticket scoreboard is glitching so we must find the value of the digit in the hundreds place

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

A				A									
6000	30	80	10	6000	700	2000	7000	3000	40	10	5000	5000	700

		A			A				A						A	
100	5000	6000	2000	90	6000	700	2000	3000	6000	90	10	300	8000	60	6000	30

3000	7000	500	700	2000

What is the value of the 6 in 6,917? → **A**

What is the value of the 1 in 3,517? → **R**

What is the value of the 6 in 161? → **W**

What is the value of the 3 in 2,230? → **S**

What is the value of the 4 in 1,940? → **G**

What is the value of the 5 in 1,599? → **U**

What is the value of the 8 in 9,082? → **T**

What is the value of the 3 in 385? → **I**

What is the value of the 9 in 497? → **B**

What is the value of the 1 in 6,140? → **H**

What is the value of the 7 in 67,860? → **O**

What is the value of the 5 in 45,911? → **E**

What is the value of the 7 in 2,726? → **N**

What is the value of the 8 in 68,453? → **C**

What is the value of the 2 in 2,367? → **D**

What is the value of the 3 in 3,186? → **F**

Scratch space:

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

To reveal the final clue we must divide the cold sports drinks equally among all the teammates

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:

$12 \div 6 = \boxed{}$

$77 \div 11 = \boxed{}$

$45 \div 9 = \boxed{}$

$72 \div 12 = \boxed{}$

$60 \div 5 = \boxed{}$

$50 \div 5 = \boxed{}$

$108 \div 12 = \boxed{}$

$33 \div 11 = \boxed{}$

$8 \div 8 = \boxed{}$

$22 \div 2 = \boxed{}$

$96 \div 12 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain showed off a rainbow flick, then strapped on a starry captain band.
2. The villain showed off a rainbow flick, then polished their shiny shin guards.
3. The villain scored with a diving header, then polished their shiny shin guards.
4. The villain blasted a power volley, then polished their shiny shin guards.
5. The villain scored with a diving header, then adjusted their striped wristband.
6. The villain performed a bicycle kick, then pulled up their golden socks.
7. The villain scored with a diving header, then tied up their neon laces.
8. The villain curled in a knuckleball shot, then adjusted their striped wristband.
9. The villain curled in a knuckleball shot, then polished their shiny shin guards.
10. The villain blasted a power volley, then strapped on a starry captain band.
11. The villain blasted a power volley, then adjusted their striped wristband.
12. The villain curled in a knuckleball shot, then strapped on a starry captain band.

Answer Key

The Golden Boot Mystery

Culprit: Harry

power volley · shiny shin guards · right footed · green headband · muddy puddle

Trail: Start 21 → Clue 1 15 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT WEAR A STARRY BAND"

$3402 + 3661 = 7063$ (T) · $2344 + 3906 = 6250$ (O) · $3540 + 5040 = 8580$ (R) · $1589 + 903 = 2492$ (E) · $2062 + 2572 = 4634$ (W) · $1829 + 3798 = 5627$ (Y) · $1418 + 1341 = 2759$ (F) · $2076 + 2923 = 4999$ (B) · $5052 + 4790 = 9842$ (A) · $2509 + 3458 = 5967$ (D) · $2979 + 3209 = 6188$ (S) · $3709 + 2454 = 6163$ (I) · $3135 + 2370 = 5505$ (H) · $1384 + 2464 = 3848$ (N)

Clue 2 (Multiplication facts (1-12)): "RIGHT FOOTED KICK PRINTS WERE IN THE MUD"

$9 \times 7 = 63$ (R) · $8 \times 11 = 88$ (I) · $1 \times 1 = 1$ (K) · $9 \times 10 = 90$ (P) · $11 \times 11 = 121$ (C) · $11 \times 10 = 110$ (T) · $6 \times 10 = 60$ (S) · $6 \times 4 = 24$ (E) · $2 \times 8 = 16$ (W) · $12 \times 3 = 36$ (D) · $5 \times 11 = 55$ (O) · $3 \times 7 = 21$ (M) · $6 \times 3 = 18$ (N) · $5 \times 5 = 25$ (H) · $4 \times 3 = 12$ (G) · $3 \times 1 = 3$ (F) · $3 \times 10 = 30$ (U)

Clue 3 (Rounding): "THE THIEF SLIPPED IN A MUDDY PUDDLE"

Round 2,292 to the nearest hundred = 2300 (T) · Round 238 to the nearest hundred = 200 (U) · Round 499 to the nearest hundred = 500 (I) · Round 226 to the nearest ten = 230 (Y) · Round 8,629 to the nearest thousand = 9000 (A) · Round 291 to the nearest ten = 290 (N) · Round 16 to the nearest ten = 20 (M) · Round 29 to the nearest ten = 30 (P) · Round 1,987 to the nearest thousand = 2000 (F) · Round 943 to the nearest hundred = 900 (D) · Round 427 to the nearest ten = 430 (S) · Round 4,271 to the nearest hundred = 4300 (H) · Round 264 to the nearest hundred = 300 (L) · Round 371 to the nearest ten = 370 (E)

Clue 4 (Place value): "A STRAND OF GREEN HEADBAND FABRIC WAS FOUND"

What is the value of the 6 in 6,917? = 6000 (A) · What is the value of the 1 in 3,517? = 10 (R) · What is the value of the 6 in 161? = 60 (W) · What is the value of the 3 in 2,230? = 30 (S) · What is the value of the 4 in 1,940? = 40 (G) · What is the value of the 5 in 1,599? = 500 (U) · What is the value of the 8 in 9,082? = 80 (T) · What is the value of the 3 in 385? = 300 (I) · What is the value of the 9 in 497? = 90 (B) · What is the value of the 1 in 6,140? = 100 (H) · What is the value of the 7 in 67,860? = 7000 (O) · What is the value of the 5 in 45,911? = 5000 (E) · What is the value of the 7 in 2,726? = 700 (N) · What is the value of the 8 in 68,453? = 8000 (C) · What is the value of the 2 in 2,367? = 2000 (D) · What is the value of the 3 in 3,186? = 3000 (F)

Clue 5 (Division facts (1-12)): surviving statement is box 4 → Harry

$12 \div 6 = 2$ · $77 \div 11 = 7$ · $45 \div 9 = 5$ · $72 \div 12 = 6$ · $60 \div 5 = 12$ · $50 \div 5 = 10$ · $108 \div 12 = 9$ · $33 \div 11 = 3$ · $8 \div 8 = 1$ · $22 \div 2 = 11$ · $96 \div 12 = 8$