



The Mystery of the Golden Boot

Grade 4 math · Multiplication, Addition, Subtraction, Rounding, Division · Reading level grades 1-2

Detective: _____ Date: _____

The big game is today! But the Golden Boot trophy is missing. Lamine Yamal and his team must solve the math clues around the stadium to catch the thief and win!

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 trophy 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 SKILL	SPECIAL GEAR	KICKING FOOT	HAIR STYLE	TRICK DEFENSE
Leo	mega rocket shot	jetpack cleats	right footed kick	bright blue mohawk	squeaky dog toy
Mohamed	giant bicycle kick	speed shoes	right footed kick	neon green headband	squeaky dog toy
Luka	curving free kick	jetpack cleats	right footed kick	curly black hair	squeaky dog toy
Jude	curving free kick	jetpack cleats	left footed kick	bright blue mohawk	tickle tickle defense
Marcus	mega rocket shot	speed shoes	left footed kick	curly black hair	squeaky dog toy
Harry	super dribble	jetpack cleats	left footed kick	bright blue mohawk	squeaky dog toy
Pedri	super dribble	sticky gloves	left footed kick	curly black hair	slippery banana peel
Erling	mega rocket shot	golden headband	left footed kick	curly black hair	tickle tickle defense
Neymar	mega rocket shot	sticky gloves	left footed kick	bright blue mohawk	squeaky dog toy
Jack	giant bicycle kick	golden headband	left footed kick	bright blue mohawk	tickle tickle defense
Yamal	flash pass	golden headband	right footed kick	bright blue mohawk	tickle tickle defense
Kylian	super dribble	golden headband	right footed kick	neon green headband	slippery banana peel
Kevin	curving free kick	speed shoes	right footed kick	bright blue mohawk	tickle tickle defense
Gavi	super dribble	laser vision goggles	right footed kick	neon green headband	squeaky dog toy
Nico	mega rocket shot	laser vision goggles	left footed kick	bright blue mohawk	tickle tickle defense
Cole	curving free kick	laser vision goggles	left footed kick	curly black hair	tickle tickle defense
Trent	mega rocket shot	speed shoes	right footed kick	bright blue mohawk	squeaky dog toy
Bukayo	super dribble	laser vision goggles	left footed kick	bright blue mohawk	squeaky dog toy
Lamine	curving free kick	sticky gloves	left footed kick	bright blue mohawk	tickle tickle defense
Declan	flash pass	golden headband	left footed kick	bright blue mohawk	tickle tickle defense
Robert	super dribble	sticky gloves	left footed kick	neon green headband	squeaky dog toy

CLUE 1
Multiplication facts (1-12)

We need to count the soccer balls. They are sitting in equal rows on the field. Multiply the rows to help Lamine find the first big clue!

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

T			T											T				
11	4	66	11	4	132	66	60	99	30	66	27	88	30	11	110	66	1	20
		T									T							
108	66	11	12	1	81	55	81	6	66	1	11	27						

$11 \times 1 = \square \rightarrow$ T	$5 \times 4 = \square \rightarrow$ R	$12 \times 5 = \square \rightarrow$ F
$4 \times 3 = \square \rightarrow$ P	$11 \times 5 = \square \rightarrow$ K	$6 \times 11 = \square \rightarrow$ E
$9 \times 11 = \square \rightarrow$ D	$3 \times 9 = \square \rightarrow$ S	$1 \times 1 = \square \rightarrow$ A
$9 \times 12 = \square \rightarrow$ J	$1 \times 6 = \square \rightarrow$ L	$8 \times 11 = \square \rightarrow$ N
$2 \times 2 = \square \rightarrow$ H	$9 \times 9 = \square \rightarrow$ C	$10 \times 3 = \square \rightarrow$ O
$11 \times 10 = \square \rightarrow$ W	$11 \times 12 = \square \rightarrow$ I	

Scratch space:

CLUE 2

The coach needs to count the jerseys. Add the red jerseys and the blue jerseys together. This total opens the locker with the next clue!

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

Diagram illustrating the state of 32 registers (16 in the top row, 16 in the bottom row) after the first instruction. The registers are arranged in two rows of 16. The top row contains the following values: 4026, 5155, 9582, 4582, 8079, 4582, 7602, 9582, 4382, 4026, 4296, 4655, 4382, 4296, 9582, 4206. The bottom row contains the following values: 4026, 5155, 9582, 4655, 9461, 4751, 9582, 9647, 4026, 9647, 8795, 8795, 4026. The registers containing the value 4026 are highlighted with an orange background and a 'T' label, indicating they are the target of the instruction.

$$2306 + 1720 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$2567 + 1729 = \boxed{} \rightarrow \boxed{\text{K}}$$

$$2402 + 2753 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$3215 + 5580 = \boxed{} \rightarrow \boxed{\text{O}}$$

$$5796 + 3786 = \boxed{} \rightarrow \boxed{\text{E}}$$

$2938 + 1444 = \boxed{} \rightarrow \boxed{\text{C}}$

$2957 + 4645 = \square \rightarrow \boxed{\text{P}}$

$$2846 + 6615 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$1338 + 2868 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$2703 + 1879 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$1760 + 2991 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$3125 + 1530 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$2597 + 2047 = \boxed{} \rightarrow \boxed{\text{W}}$$

$$6230 + 3417 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$3288 + 4791 = \boxed{} \rightarrow \boxed{\text{U}}$$

Scratch space:

CLUE 3
Subtraction

The team had many training cones. Some cones blew away in the wind. Subtract to find how many are left. That number leads us to a clue!

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

T								T								
8398	2194	3827	5232	5785	5232	4430	3827	7929	8398	3451	3827	4535	4535	3451	8684	7980

T			T												
8398	2194	3827	8398	1137	7929	7364	4535	3827	8099	3827	3451	3827	6841	5232	3827

$9066 - 668 = \square \rightarrow \text{T}$

$4647 - 1196 = \square \rightarrow \text{F}$

$5732 - 500 = \square \rightarrow \text{S}$

$10515 - 2535 = \square \rightarrow \text{R}$

$8210 - 846 = \square \rightarrow \text{K}$

$5609 - 1782 = \square \rightarrow \text{E}$

$8120 - 1279 = \square \rightarrow \text{N}$

$10590 - 2661 = \square \rightarrow \text{C}$

$9456 - 4921 = \square \rightarrow \text{L}$

$9494 - 3709 = \square \rightarrow \text{U}$

$10390 - 1706 = \square \rightarrow \text{O}$

$6198 - 1768 = \square \rightarrow \text{P}$

$2316 - 122 = \square \rightarrow \text{H}$

$5802 - 4665 = \square \rightarrow \text{I}$

$9713 - 1614 = \square \rightarrow \text{D}$

Scratch space:

CLUE 4 Rounding

The stadium radar measured the speed of a kick. The radar screen only shows rounded numbers. Round the kick speed to find the next secret!

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

A												A		
110	3700	2000	1100	1300	290	5000	3700	430	300	230	290	110	1100	2000

						A									
30	1100	230	130	230	4300	110	700	430	230	370	5000	3700	230	290	1100

Round 109 to the nearest ten → **A**

Round 426 to the nearest ten → **L**

Round 889 to the nearest hundred → **N**

Round 1,795 to the nearest thousand → **R**

Round 29 to the nearest ten → **P**

Round 372 to the nearest ten → **F**

Round 349 to the nearest hundred → **U**

Round 3,691 to the nearest hundred → **B**

Round 4,317 to the nearest hundred → **W**

Round 228 to the nearest ten → **E**

Round 5,070 to the nearest thousand → **T**

Round 1,140 to the nearest hundred → **I**

Round 1,290 to the nearest hundred → **G**

Round 288 to the nearest ten → **H**

Round 713 to the nearest hundred → **S**

Round 126 to the nearest ten → **C**

Round 54 to the nearest ten → **D**

Scratch space:

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

It is time to make equal teams. Split the players into even groups. Divide them up to reveal the final clue and save the day!

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:

$9 \div 3 = \boxed{}$

$42 \div 6 = \boxed{}$

$96 \div 12 = \boxed{}$

$108 \div 12 = \boxed{}$

$12 \div 6 = \boxed{}$

$60 \div 12 = \boxed{}$

$3 \div 3 = \boxed{}$

$144 \div 12 = \boxed{}$

$36 \div 9 = \boxed{}$

$80 \div 8 = \boxed{}$

$110 \div 10 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain curls a free kick, then spots the defense with laser vision goggles.
2. The villain performs a super dribble, then shines bright with a golden headband.
3. The villain sends a flash pass, then shines bright with a golden headband.
4. The villain fires a mega rocket shot, then grabs the trophy with sticky gloves.
5. The villain curls a free kick, then zips past the goalie in speed shoes.
6. The villain leaps for a giant bicycle kick, then shines bright with a golden headband.
7. The villain fires a mega rocket shot, then spots the defense with laser vision goggles.
8. The villain curls a free kick, then grabs the trophy with sticky gloves.
9. The villain fires a mega rocket shot, then shines bright with a golden headband.
10. The villain curls a free kick, then blasts into the sky on jetpack cleats.
11. The villain performs a super dribble, then blasts into the sky on jetpack cleats.
12. The villain sends a flash pass, then spots the defense with laser vision goggles.

Answer Key

The Mystery of the Golden Boot

Culprit: Jack

giant bicycle kick · golden headband · left footed kick · bright blue mohawk · tickle tickle defense

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

Clue 1 (Multiplication facts (1-12)): "THE THIEF DOES NOT WEAR JETPACK CLEATS"

$11 \times 1 = 11$ (T) · $5 \times 4 = 20$ (R) · $12 \times 5 = 60$ (F) · $4 \times 3 = 12$ (P) · $11 \times 5 = 55$ (K) · $6 \times 11 = 66$ (E) · $9 \times 11 = 99$ (D) · $3 \times 9 = 27$ (S) · $1 \times 1 = 1$ (A) · $9 \times 12 = 108$ (J) · $1 \times 6 = 6$ (L) · $8 \times 11 = 88$ (N) · $2 \times 2 = 4$ (H) · $9 \times 9 = 81$ (C) · $10 \times 3 = 30$ (O) · $11 \times 10 = 110$ (W) · $11 \times 12 = 132$ (I)

Clue 2 (Addition): "THE SUSPECT KICKED WITH THEIR LEFT FOOT"

$2306 + 1720 = 4026$ (T) · $2567 + 1729 = 4296$ (K) · $2402 + 2753 = 5155$ (H) · $3215 + 5580 = 8795$ (O) · $5796 + 3786 = 9582$ (E) · $2938 + 1444 = 4382$ (C) · $2957 + 4645 = 7602$ (P) · $2846 + 6615 = 9461$ (R) · $1338 + 2868 = 4206$ (D) · $2703 + 1879 = 4582$ (S) · $1760 + 2991 = 4751$ (L) · $3125 + 1530 = 4655$ (I) · $2597 + 2047 = 4644$ (W) · $6230 + 3417 = 9647$ (F) · $3288 + 4791 = 8079$ (U)

Clue 3 (Subtraction): "THE SUSPECT FELL FOR THE TICKLE DEFENSE"

$9066 - 668 = 8398$ (T) · $4647 - 1196 = 3451$ (F) · $5732 - 500 = 5232$ (S) · $10515 - 2535 = 7980$ (R) · $8210 - 846 = 7364$ (K) · $5609 - 1782 = 3827$ (E) · $8120 - 1279 = 6841$ (N) · $10590 - 2661 = 7929$ (C) · $9456 - 4921 = 4535$ (L) · $9494 - 3709 = 5785$ (U) · $10390 - 1706 = 8684$ (O) · $6198 - 1768 = 4430$ (P) · $2316 - 122 = 2194$ (H) · $5802 - 4665 = 1137$ (I) · $9713 - 1614 = 8099$ (D)

Clue 4 (Rounding): "A BRIGHT BLUE HAIR PIECE WAS LEFT BEHIND"

Round 109 to the nearest ten = 110 (A) · Round 426 to the nearest ten = 430 (L) · Round 889 to the nearest hundred = 900 (N) · Round 1,795 to the nearest thousand = 2000 (R) · Round 29 to the nearest ten = 30 (P) · Round 372 to the nearest ten = 370 (F) · Round 349 to the nearest hundred = 300 (U) · Round 3,691 to the nearest hundred = 3700 (B) · Round 4,317 to the nearest hundred = 4300 (W) · Round 228 to the nearest ten = 230 (E) · Round 5,070 to the nearest thousand = 5000 (T) · Round 1,140 to the nearest hundred = 1100 (I) · Round 1,290 to the nearest hundred = 1300 (G) · Round 288 to the nearest ten = 290 (H) · Round 713 to the nearest hundred = 700 (S) · Round 126 to the nearest ten = 130 (C) · Round 54 to the nearest ten = 50 (D)

Clue 5 (Division facts (1-12)): surviving statement is box 6 → Jack

$9 \div 3 = 3$ · $42 \div 6 = 7$ · $96 \div 12 = 8$ · $108 \div 12 = 9$ · $12 \div 6 = 2$ · $60 \div 12 = 5$ · $3 \div 3 = 1$ · $144 \div 12 = 12$ · $36 \div 9 = 4$ · $80 \div 8 = 10$ · $110 \div 10 = 11$