The Golden Boot Mystery

Grade 7 math · Multiplication, Word problems, Multi-step word problems, Integers, Division · Reading level grades 7-9

Detective: _____ **Date:** _____

Right before the championship final, someone tampered with the pitch sprinklers and hid the match ball! Inspect the locker room clues to unmask the culprit.

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 stadium intruder is _____

Possible suspects

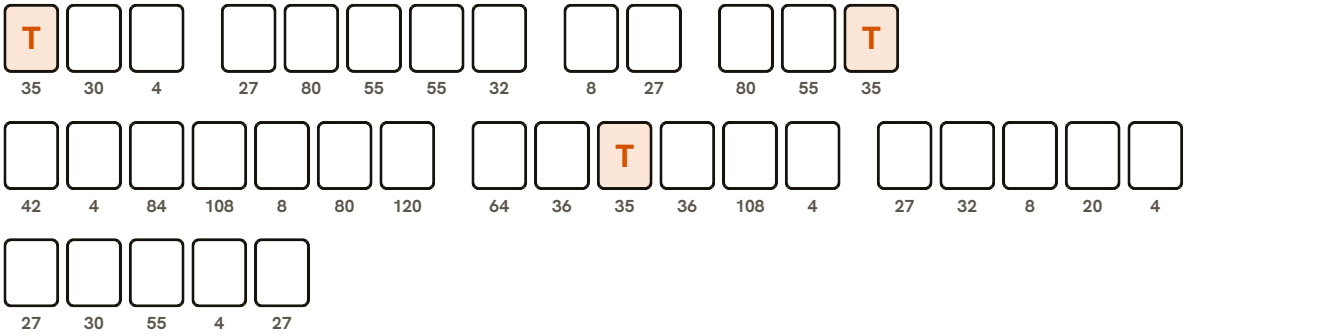
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	SIGNATURE MOVE	CLEAT BRAND	DOMINANT FOOT	HAIRSTYLE	DISTRACTION
Harry Kane	Panenka Penalty	King Soccer Shoes	Left Footed	Braided Topknot	Flash Camera
Bruno Fernandes	No Look Pass	Predator Cleats	Left Footed	Braided Topknot	Flash Camera
Kevin De Bruyne	Curving Knuckleball	Mercurial Boots	Right Footed	Braided Topknot	Flash Camera
Rodri	Power Header	Mercurial Boots	Left Footed	Braided Topknot	Vuvuzela Horn
Darwin Núñez	Curving Knuckleball	Predator Cleats	Right Footed	Braided Topknot	Vuvuzela Horn
Eduardo Camavinga	Panenka Penalty	Tekela Cleats	Right Footed	Curly Fro	Ref Whistle
Federico Valverde	Panenka Penalty	King Soccer Shoes	Left Footed	Blonde Fade	Ref Whistle
Lamine Yamal	Power Header	Predator Cleats	Left Footed	Braided Topknot	Flash Camera
Pedri	Power Header	Mercurial Boots	Left Footed	Curly Fro	Flash Camera
Jude Bellingham	Power Header	King Soccer Shoes	Left Footed	Curly Fro	Flash Camera
Vinicius Jr	Curving Knuckleball	Mercurial Boots	Left Footed	Braided Topknot	Flash Camera
Marcus Rashford	Panenka Penalty	King Soccer Shoes	Left Footed	Curly Fro	Ref Whistle
Kylian Mbappé	Curving Knuckleball	Tekela Cleats	Left Footed	Braided Topknot	Vuvuzela Horn
Cole Palmer	No Look Pass	Tekela Cleats	Right Footed	Curly Fro	Flash Camera
Gavi	Bicycle Kick	Tekela Cleats	Right Footed	Curly Fro	Flash Camera
Jamal Musiala	Panenka Penalty	Future Spike Shoes	Left Footed	Braided Topknot	Flash Camera
Antoine Griezmann	Panenka Penalty	Future Spike Shoes	Right Footed	Curly Fro	Vuvuzela Horn
Erling Haaland	Panenka Penalty	Predator Cleats	Right Footed	Curly Fro	Ref Whistle
Son Heung min	Bicycle Kick	Future Spike Shoes	Left Footed	Braided Topknot	Flash Camera
Declan Rice	Bicycle Kick	Future Spike Shoes	Right Footed	Curly Fro	Vuvuzela Horn
Mohamed Salah	Bicycle Kick	Future Spike Shoes	Left Footed	Blonde Fade	Ref Whistle

CLUE 1 Multiplication facts (1-12)

> Analyzing equipment room inventory logs requires combining shipments and subtracting damaged gear.

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



5 × 7 = ☐ → T

3 × 9 = ☐ → S

6 × 6 = ☐ → U

5 × 11 = ☐ → O

8 × 10 = ☐ → N

8 × 4 = ☐ → P

12 × 9 = ☐ → R

10 × 2 = ☐ → K

12 × 10 = ☐ → G

5 × 6 = ☐ → H

1 × 8 = ☐ → I

8 × 8 = ☐ → F

12 × 7 = ☐ → A

6 × 7 = ☐ → W

2 × 2 = ☐ → E

Scratch space:

CLUE 2 Word problems

Reviewing ticket booth totals gives the exact count of fans passing through the turnstiles.

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

A witness saw the villain was

L									
18	92	15	37	15	72	72	37	92	78

.

Equipment manager lined up 3 rows of 6 captain armbands. How many captain armbands in all?

Answer: ☐ → **L**

Equipment manager found 11 training cones yesterday and 4 more today. How many training cones in all?

Answer: ☐ → **F**

Equipment manager lined up 9 rows of 8 water bottles. How many water bottles in all?

Answer: ☐ → **O**

There were 57 captain armbands. 20 were used up. How many captain armbands are left?

Answer: ☐ → **T**

There were 112 captain armbands. 20 were used up. How many captain armbands are left?

Answer: ☐ → **E**

There were 101 training cones. 23 were used up. How many training cones are left?

Answer: ☐ → **D**

Scratch space:

CLUE 3 Multi-step word problems

Calculating training cone formations requires multiplying grid rows by markers per group.

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

Someone scared the villain off with

F								E	R	
15	71	75	85	60	56	75	47			75

.

Equipment manager collected 40 captain armbands in the morning and 35 captain armbands in the afternoon, then split them equally among 5 national squad. How many captain armbands did each get?

Answer: ☐ → F

There were 119 captain armbands in all. 25 captain armbands were set aside. The rest were shared equally among 2 national squad. How many captain armbands did each get?

Answer: ☐ → M

There were 511 team jerseys in all. 7 team jerseys were set aside. The rest were shared equally among 9 national squad. How many team jerseys did each get?

Answer: ☐ → C

Equipment manager filled 6 boxes with 6 team jerseys each, then found 39 more team jerseys. How many team jerseys are there in all?

Answer: ☐ → A

There were 420 training cones in all. 3 national squad used 40 training cones each. The other 5 national squad shared the rest equally. How many training cones did each of the other national squad get?

Answer: ☐ → H

Equipment manager filled 3 boxes with 2 training cones each, then found 79 more training cones. How many training cones are there in all?

Answer: ☐ → S

Equipment manager collected 123 training cones in the morning and 19 training cones in the afternoon, then split them equally among 2 national squad. How many training cones did each get?

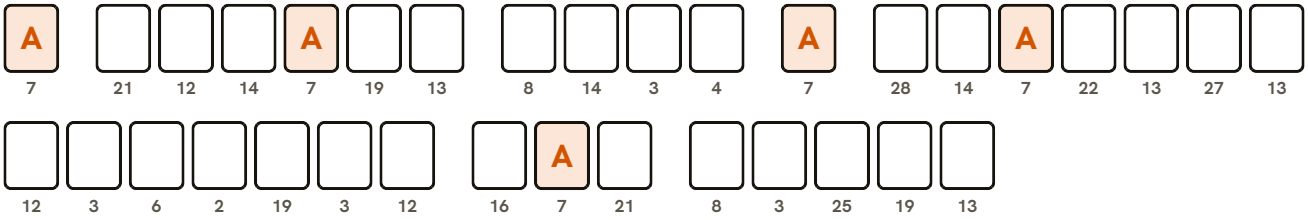
Answer: ☐ → L

Scratch space:

CLUE 4 Integers

Tracking thermal tracking data means calculating elevation changes and yardage shifts on the pitch.

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



(-9) + 16 = ☐ → A

(-6) + 28 = ☐ → I

(-14) + 18 = ☐ → M

(-14) + 30 = ☐ → W

(-9) + 15 = ☐ → P

(-9) + 11 = ☐ → K

(-12) + 20 = ☐ → F

(-2) + 21 = ☐ → N

(-9) + 12 = ☐ → O

19 - (-8) = ☐ → E

6 - (-6) = ☐ → T

(-5) + 19 = ☐ → R

(-3) + 31 = ☐ → B

(-12) + 37 = ☐ → U

7 - (-6) = ☐ → D

17 - (-4) = ☐ → S

Scratch space:

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

Dividing energy drink bottles equally among squad coolers reveals exact inventory levels.

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:

48 ÷ 12 = ☐ | 72 ÷ 6 = ☐ | 80 ÷ 8 = ☐ | 55 ÷ 5 = ☐ | 7 ÷ 1 = ☐

18 ÷ 9 = ☐ | 11 ÷ 11 = ☐ | 45 ÷ 9 = ☐ | 72 ÷ 9 = ☐ | 90 ÷ 10 = ☐

12 ÷ 2 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain chipped a panenka penalty, then tied up tekela cleats.
2. The villain chipped a panenka penalty, then laced up predator cleats.
3. The villain faked a no look pass, then laced up predator cleats.
4. The villain curled a knuckleball, then strapped on mercurial boots.
5. The villain drilled a power header, then laced up future spike shoes.
6. The villain faked a no look pass, then laced up future spike shoes.
7. The villain curled a knuckleball, then laced up future spike shoes.
8. The villain drilled a power header, then shined king soccer shoes.
9. The villain drilled a power header, then tied up tekela cleats.
10. The villain drilled a power header, then laced up predator cleats.
11. The villain chipped a panenka penalty, then laced up future spike shoes.
12. The villain chipped a panenka penalty, then shined king soccer shoes.

TEACHER / PARENT

Answer Key

The Golden Boot Mystery

Culprit: Bruno Fernandes

No Look Pass · Predator Cleats · Left Footed · Braided Topknot · Flash Camera

Trail: Start 21 → Clue 1 16 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE SNOOP IS NOT WEARING FUTURE SPIKE SHOES"

5 × 7 = 35 (T) · 3 × 9 = 27 (S) · 6 × 6 = 36 (U) · 5 × 11 = 55 (O) · 8 × 10 = 80 (N) · 8 × 4 = 32 (P) · 12 × 9 = 108 (R) · 10 × 2 = 20 (K) · 12 × 10 = 120 (G) · 5 × 6 = 30 (H) · 1 × 8 = 8 (I) · 8 × 8 = 64 (F) · 12 × 7 = 84 (A) · 6 × 7 = 42 (W) · 2 × 2 = 4 (E)

Clue 2 (Word problems): "LEFT FOOTED"

Equipment manager lined up 3 rows of 6 captain armbands. How many captain armbands in all? = 18 (L) · Equipment manager found 11 training cones yesterday and 4 more today. How many training cones in all? = 15 (F) · Equipment manager lined up 9 rows of 8 water bottles. How many water bottles in all? = 72 (O) · There were 57 captain armbands. 20 were used up. How many captain armbands are left? = 37 (T) · There were 112 captain armbands. 20 were used up. How many captain armbands are left? = 92 (E) · There were 101 training cones. 23 were used up. How many training cones are left? = 78 (D)

Clue 3 (Multi-step word problems): "FLASH CAMERA"

Equipment manager collected 40 captain armbands in the morning and 35 captain armbands in the afternoon, then split them equally among 5 national squad. How many captain armbands did each get? = 15 (F) · There were 119 captain armbands in all. 25 captain armbands were set aside. The rest were shared equally among 2 national squad. How many captain armbands did each get? = 47 (M) · There were 511 team jerseys in all. 7 team jerseys were set aside. The rest were shared equally among 9 national squad. How many team jerseys did each get? = 56 (C) · Equipment manager filled 6 boxes with 6 team jerseys each, then found 39 more team jerseys. How many team jerseys are there in all? = 75 (A) · There were 420 training cones in all. 3 national squad used 40 training cones each. The other 5 national squad shared the rest equally. How many training cones did each of the other national squad get? = 60 (H) · Equipment manager filled 3 boxes with 2 training cones each, then found 79 more training cones. How many training cones are there in all? = 85 (S) · Equipment manager collected 123 training cones in the morning and 19 training cones in the afternoon, then split them equally among 2 national squad. How many training cones did each get? = 71 (L)

Clue 4 (Integers): "A STRAND FROM A BRAIDED TOPKNOT WAS FOUND"

(-9) + 16 = 7 (A) · (-6) + 28 = 22 (I) · (-14) + 18 = 4 (M) · (-14) + 30 = 16 (W) · (-9) + 15 = 6 (P) · (-9) + 11 = 2 (K) · (-12) + 20 = 8 (F) · (-2) + 21 = 19 (N) · (-9) + 12 = 3 (O) · 19 - (-8) = 27 (E) · 6 - (-6) = 12 (T) · (-5) + 19 = 14 (R) · (-3) + 31 = 28 (B) · (-12) + 37 = 25 (U) · 7 - (-6) = 13 (D) · 17 - (-4) = 21 (S)

Clue 5 (Division facts (1-12)): surviving statement is box 3 → Bruno Fernandes

48 ÷ 12 = 4 · 72 ÷ 6 = 12 · 80 ÷ 8 = 10 · 55 ÷ 5 = 11 · 7 ÷ 1 = 7 · 18 ÷ 9 = 2 · 11 ÷ 11 = 1 · 45 ÷ 9 = 5 · 72 ÷ 9 = 8 · 90 ÷ 10 = 9 · 12 ÷ 2 = 6