The Case of the Missing Golden Trophy

Grade 7 math · Multiplication, Multi-step word problems, Word problems, Integers, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

The shiny Golden Trophy vanished right before the championship final! The Head Coach saw a shadowy figure dart across the pitch.

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 Match Snoop 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	SPECIAL SKILL	CLEAT STYLE	HAIRSTYLE	FIELD HAZARD
Cristiano Turf	Curving Free Kick	Speed Boost	Wears Neon Cleats	Spiky Hair	Whistle Blast
Jude Sweep	Sliding Tackle	Laser Focus	Wears Black Cleats	Braided Hair	Red Card Flare
Marta Goal	Rocket Volley	Super Stamina	Wears Neon Cleats	Buzz Cut	Mud Puddle
Bukayo Wing	Bicycle Kick	Shield Tackle	Wears Black Cleats	Spiky Hair	Red Card Flare
Trinity Boot	Rocket Volley	Shield Tackle	Wears Neon Cleats	Braided Hair	Whistle Blast
Kevin Pass	Rocket Volley	Laser Focus	Wears Black Cleats	Braided Hair	Red Card Flare
Luka Cross	Bicycle Kick	Shield Tackle	Wears Neon Cleats	Spiky Hair	Red Card Flare
Pickford Save	Rocket Volley	Super Stamina	Wears Black Cleats	Braided Hair	Red Card Flare
Gio Dribble	Power Header	Speed Boost	Wears Black Cleats	Braided Hair	Red Card Flare
Alex Kick	Rocket Volley	Laser Focus	Wears Neon Cleats	Braided Hair	Whistle Blast
Erling Power	Sliding Tackle	Speed Boost	Wears Black Cleats	Spiky Hair	Mud Puddle
Megan Pitch	Power Header	Speed Boost	Wears Neon Cleats	Braided Hair	Whistle Blast
Cole Bend	Sliding Tackle	Speed Boost	Wears Neon Cleats	Buzz Cut	Red Card Flare
Sammy Swift	Curving Free Kick	Quick Reflex	Wears Black Cleats	Braided Hair	Red Card Flare
Kylian Dash	Curving Free Kick	Quick Reflex	Wears Black Cleats	Buzz Cut	Mud Puddle
Alyssa Header	Bicycle Kick	Super Stamina	Wears Neon Cleats	Spiky Hair	Whistle Blast
Walker Guard	Sliding Tackle	Quick Reflex	Wears Black Cleats	Spiky Hair	Whistle Blast
Christian Rush	Rocket Volley	Quick Reflex	Wears Black Cleats	Spiky Hair	Red Card Flare
Virgil Wall	Power Header	Speed Boost	Wears Neon Cleats	Spiky Hair	Red Card Flare
Sini Net	Sliding Tackle	Quick Reflex	Wears Neon Cleats	Braided Hair	Red Card Flare
Sonny Corner	Rocket Volley	Shield Tackle	Wears Black Cleats	Braided Hair	Mud Puddle

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CLUE 1 Multiplication facts (1-12)

> The coach tallied game tickets and snack bar receipts from three separate gates to narrow down the timeline.

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

T					T														
7	10	80	25	14	7	64	10	24	50	15	15	81	90	15	80	24			
		T									T								
50	15	7	132	24	80	24	132	81	80	120	24	7	14	25	42	50	14		

- $7 \times 1 =$ ☐ → **T**
- $7 \times 2 =$ ☐ → **A**
- $12 \times 10 =$ ☐ → **R**
- $7 \times 6 =$ ☐ → **I**
- $8 \times 8 =$ ☐ → **C**
- $9 \times 9 =$ ☐ → **P**
- $10 \times 5 =$ ☐ → **N**
- $9 \times 10 =$ ☐ → **D**
- $11 \times 12 =$ ☐ → **U**
- $5 \times 3 =$ ☐ → **O**
- $5 \times 5 =$ ☐ → **M**
- $10 \times 1 =$ ☐ → **H**
- $4 \times 6 =$ ☐ → **S**
- $8 \times 10 =$ ☐ → **E**

Scratch space:

CLUE 2 Multi-step word problems

The referee checked equal stacks of training cones set up across every practice drill on the field.

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

A witness saw the villain was

W								C	K	C				T		.			
81	18	42	16	86	9	65	42				65	18	42		86				

Referee filled 3 boxes with 4 team jerseys each, then found 69 more team jerseys. How many team jerseys are there in all?

Answer: ☐ → W

There were 182 water bottles in all. 2 Strikers used 7 water bottles each. The other 4 Strikers shared the rest equally. How many water bottles did each of the other Strikers get?

Answer: ☐ → A

There were 466 traffic cones in all. 2 Strikers used 18 traffic cones each. The other 5 Strikers shared the rest equally. How many traffic cones did each of the other Strikers get?

Answer: ☐ → S

There were 540 soccer balls in all. 20 soccer balls were set aside. The rest were shared equally among 8 Strikers. How many soccer balls did each get?

Answer: ☐ → L

Referee collected 14 water bottles in the morning and 94 water bottles in the afternoon, then split them equally among 6 Strikers. How many water bottles did each get?

Answer: ☐ → E

There were 120 water bottles in all. 4 Strikers used 22 water bottles each. The other 2 Strikers shared the rest equally. How many water bottles did each of the other Strikers get?

Answer: ☐ → R

There were 44 team jerseys in all. 1 Strikers used 26 team jerseys each. The other 2 Strikers shared the rest equally. How many team jerseys did each of the other Strikers get?

Answer: ☐ → B

Scratch space:

CLUE 3 Word problems

The groundskeeper measured field markings and gear bags to figure out where the intruder hid.

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

Someone scared the villain off with

R					R							R			.
97	35	32	25	20	97	32	49	116	20	97	35				

There were 109 team jerseys. 12 were used up. How many team jerseys are left?

Answer: ☐ → R

Referee found 9 water bottles yesterday and 107 more today. How many water bottles in all?

Answer: ☐ → L

Referee found 33 traffic cones yesterday and 2 more today. How many traffic cones in all?

Answer: ☐ → E

There were 58 team jerseys. 38 were used up. How many team jerseys are left?

Answer: ☐ → A

Referee found 29 soccer balls yesterday and 20 more today. How many soccer balls in all?

Answer: ☐ → F

Referee found 12 team jerseys yesterday and 20 more today. How many team jerseys in all?

Answer: ☐ → D

Referee found 19 traffic cones yesterday and 6 more today. How many traffic cones in all?

Answer: ☐ → C

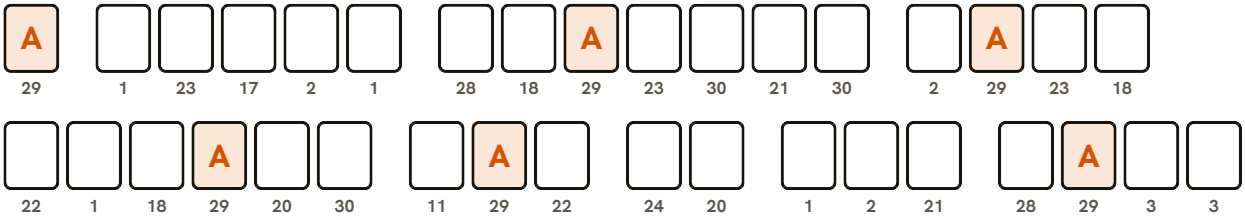
Scratch space:

CLUE 4

Integers

The scoreboard tracker analyzed gain and loss of yardage and penalties during the warmups.

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



(-8) + 37 = ☐ → A

18 - (-2) = ☐ → N

8 - (-9) = ☐ → G

(-10) + 31 = ☐ → E

14 - (-10) = ☐ → O

14 - (-14) = ☐ → B

(-3) + 26 = ☐ → I

(-12) + 23 = ☐ → W

18 - (-12) = ☐ → D

(-11) + 33 = ☐ → S

(-10) + 12 = ☐ → H

(-10) + 13 = ☐ → L

(-11) + 12 = ☐ → T

(-6) + 24 = ☐ → R

Scratch space:

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

> The team captain split extra soccer balls equally among all five practice squads.

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:

90 ÷ 9 = ☐	6 ÷ 1 = ☐	70 ÷ 10 = ☐	10 ÷ 10 = ☐	44 ÷ 4 = ☐
81 ÷ 9 = ☐	48 ÷ 12 = ☐	6 ÷ 3 = ☐	24 ÷ 2 = ☐	25 ÷ 5 = ☐
12 ÷ 4 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain hit a power header, then raised a shield tackle.
2. The villain performed a bicycle kick, then raised a shield tackle.
3. The villain executed a sliding tackle, then tapped super stamina.
4. The villain curved a free kick, then raised a shield tackle.
5. The villain executed a sliding tackle, then activated a speed boost.
6. The villain executed a sliding tackle, then channeled laser focus.
7. The villain hit a power header, then activated a speed boost.
8. The villain launched a rocket volley, then channeled laser focus.
9. The villain hit a power header, then showed quick reflex.
10. The villain curved a free kick, then showed quick reflex.
11. The villain hit a power header, then channeled laser focus.
12. The villain launched a rocket volley, then activated a speed boost.

TEACHER / PARENT

Answer Key

The Case of the Missing Golden Trophy

Culprit: Kevin Pass

Rocket Volley · Laser Focus · Wears Black Cleats · Braided Hair · Red Card Flare

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE MATCH SNOOP DOES NOT USE SUPER STAMINA"

7 × 1 = 7 (T) · 7 × 2 = 14 (A) · 12 × 10 = 120 (R) · 7 × 6 = 42 (I) · 8 × 8 = 64 (C) · 9 × 9 = 81 (P) · 10 × 5 = 50 (N) · 9 × 10 = 90 (D) · 11 × 12 = 132 (U) · 5 × 3 = 15 (O) · 5 × 5 = 25 (M) · 10 × 1 = 10 (H) · 4 × 6 = 24 (S) · 8 × 10 = 80 (E)

Clue 2 (Multi-step word problems): "WEARS BLACK CLEATS"

Referee filled 3 boxes with 4 team jerseys each, then found 69 more team jerseys. How many team jerseys are there in all? = 81 (W) · There were 182 water bottles in all. 2 Strikers used 7 water bottles each. The other 4 Strikers shared the rest equally. How many water bottles did each of the other Strikers get? = 42 (A) · There were 466 traffic cones in all. 2 Strikers used 18 traffic cones each. The other 5 Strikers shared the rest equally. How many traffic cones did each of the other Strikers get? = 86 (S) · There were 540 soccer balls in all. 20 soccer balls were set aside. The rest were shared equally among 8 Strikers. How many soccer balls did each get? = 65 (L) · Referee collected 14 water bottles in the morning and 94 water bottles in the afternoon, then split them equally among 6 Strikers. How many water bottles did each get? = 18 (E) · There were 120 water bottles in all. 4 Strikers used 22 water bottles each. The other 2 Strikers shared the rest equally. How many water bottles did each of the other Strikers get? = 16 (R) · There were 44 team jerseys in all. 1 Strikers used 26 team jerseys each. The other 2 Strikers shared the rest equally. How many team jerseys did each of the other Strikers get? = 9 (B)

Clue 3 (Word problems): "RED CARD FLARE"

There were 109 team jerseys. 12 were used up. How many team jerseys are left? = 97 (R) · Referee found 9 water bottles yesterday and 107 more today. How many water bottles in all? = 116 (L) · Referee found 33 traffic cones yesterday and 2 more today. How many traffic cones in all? = 35 (E) · There were 58 team jerseys. 38 were used up. How many team jerseys are left? = 20 (A) · Referee found 29 soccer balls yesterday and 20 more today. How many soccer balls in all? = 49 (F) · Referee found 12 team jerseys yesterday and 20 more today. How many team jerseys in all? = 32 (D) · Referee found 19 traffic cones yesterday and 6 more today. How many traffic cones in all? = 25 (C)

Clue 4 (Integers): "A TIGHT BRAIDED HAIR STRAND WAS ON THE BALL"

(-8) + 37 = 29 (A) · 18 - (-2) = 20 (N) · 8 - (-9) = 17 (G) · (-10) + 31 = 21 (E) · 14 - (-10) = 24 (O) · 14 - (-14) = 28 (B) · (-3) + 26 = 23 (I) · (-12) + 23 = 11 (W) · 18 - (-12) = 30 (D) · (-11) + 33 = 22 (S) · (-10) + 12 = 2 (H) · (-10) + 13 = 3 (L) · (-11) + 12 = 1 (T) · (-6) + 24 = 18 (R)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Kevin Pass

90 ÷ 9 = 10 · 6 ÷ 1 = 6 · 70 ÷ 10 = 7 · 10 ÷ 10 = 1 · 44 ÷ 4 = 11 · 81 ÷ 9 = 9 · 48 ÷ 12 = 4 · 6 ÷ 3 = 2 · 24 ÷ 2 = 12 · 25 ÷ 5 = 5 · 12 ÷ 4 = 3