The Great World Cup Ticket Heist

Grade 4 math · Multiplication, Rounding, Fractions of a number, Bar models · Reading level grades 3-4

Detective: _____ **Date:** _____

Disaster has struck the World Cup! Right before the final match, someone snuck into the stadium vault and stole every single ticket. The stands will be completely empty unless we solve this case! The only suspects are the elite national team head coaches. Grab your whistle and help us find 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 Ticket Snatcher is _____

Possible suspects

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

NAME	TACTICS DRILL	SPECIAL EQUIPMENT	WRITING HAND	CAP STYLE	FIELD SNACK
Graham Arnold	Counter-Attack Drill	Laser Clipboard	Left-Handed Writer	Wearing Black Cap	Fizzy Sports Drink
Miguel Herrera	Super-Sub Strategy	Golden Whistle	Right-Handed Writer	Wearing Neon Cap	Chilled Orange Slice
Monica Vergara	High-Press Defense	Golden Whistle	Right-Handed Writer	Wearing Black Cap	Salty Pretzel Cup
Diego Maradona	Counter-Attack Drill	Smart Stopwatch	Right-Handed Writer	Wearing Silver Cap	Salty Pretzel Cup
Dorival Junior	Bicycle-Kick Setup	Golden Whistle	Right-Handed Writer	Wearing Black Cap	Chilled Orange Slice
Tite	Counter-Attack Drill	Laser Clipboard	Left-Handed Writer	Wearing Silver Cap	Chilled Orange Slice
Sarina Wiegman	Bicycle-Kick Setup	Laser Clipboard	Right-Handed Writer	Wearing Black Cap	Salty Pretzel Cup
Gregg Berhalter	Tiki-Taka Passes	GPS Player Tracker	Right-Handed Writer	Wearing Neon Cap	Chilled Orange Slice
Ange Postecoglou	Counter-Attack Drill	Mega Megaphone	Right-Handed Writer	Wearing Neon Cap	Chilled Orange Slice
Arthur Elias	Bicycle-Kick Setup	Mega Megaphone	Left-Handed Writer	Wearing Neon Cap	Salty Pretzel Cup
Hajime Moriyasu	Tiki-Taka Passes	GPS Player Tracker	Right-Handed Writer	Wearing Silver Cap	Salty Pretzel Cup
Marcelo Bielsa	High-Press Defense	Golden Whistle	Left-Handed Writer	Wearing Neon Cap	Chilled Orange Slice
Corinne Diacre	High-Press Defense	GPS Player Tracker	Right-Handed Writer	Wearing Neon Cap	Chilled Orange Slice
Lionel Scaloni	Counter-Attack Drill	Laser Clipboard	Left-Handed Writer	Wearing Neon Cap	Salty Pretzel Cup
Phil Neville	Bicycle-Kick Setup	GPS Player Tracker	Right-Handed Writer	Wearing Neon Cap	Fizzy Sports Drink
Emma Hayes	Bicycle-Kick Setup	GPS Player Tracker	Right-Handed Writer	Wearing Neon Cap	Salty Pretzel Cup
Didier Deschamps	Tiki-Taka Passes	GPS Player Tracker	Left-Handed Writer	Wearing Black Cap	Chilled Orange Slice
Futoshi Ikeda	High-Press Defense	Laser Clipboard	Left-Handed Writer	Wearing Silver Cap	Chilled Orange Slice
Tony Gustavsson	Super-Sub Strategy	Smart Stopwatch	Left-Handed Writer	Wearing Neon Cap	Fizzy Sports Drink
Jaime Lozano	High-Press Defense	Golden Whistle	Right-Handed Writer	Wearing Neon Cap	Chilled Orange Slice
Gareth Southgate	Counter-Attack Drill	Laser Clipboard	Right-Handed Writer	Wearing Silver Cap	Chilled Orange Slice

CLUE 1 Multiplication facts (1-12)

> We found the ticket vault lock. To open it, we must count the total soccer cleats packed in rows. Let us multiply the rows to crack the code and find our first big clue!

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

T			T										T						
144	14	45	144	14	32	45	10	22	121	45	7	55	121	144	60	7	45		
T																			
144	14	45	110	45	1	24	110	45	1	24	16	14	121	55	45				

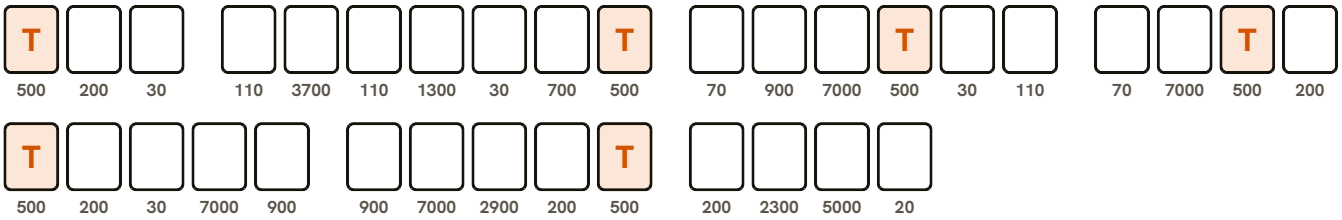
12 × 12 = ☐ → T	2 × 7 = ☐ → H	9 × 5 = ☐ → E
11 × 10 = ☐ → M	4 × 6 = ☐ → A	6 × 10 = ☐ → U
11 × 11 = ☐ → O	1 × 1 = ☐ → G	1 × 7 = ☐ → S
10 × 1 = ☐ → F	2 × 8 = ☐ → P	11 × 5 = ☐ → N
11 × 2 = ☐ → D	8 × 4 = ☐ → I	

Scratch space:

CLUE 2 Rounding

> The stadium security system only shows estimates. We have to round the huge fan turnout number to the nearest thousand to unlock the camera footage!

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



Round 459 to the nearest hundred ☐ → T

Round 224 to the nearest hundred ☐ → H

Round 880 to the nearest hundred ☐ → R

Round 2,892 to the nearest hundred ☐ → G

Round 657 to the nearest hundred ☐ → C

Round 68 to the nearest ten ☐ → W

Round 3,662 to the nearest hundred ☐ → U

Round 2,274 to the nearest hundred ☐ → A

Round 32 to the nearest ten ☐ → E

Round 7,173 to the nearest thousand ☐ → I

Round 109 to the nearest ten ☐ → S

Round 1,252 to the nearest hundred ☐ → P

Round 5,369 to the nearest thousand ☐ → N

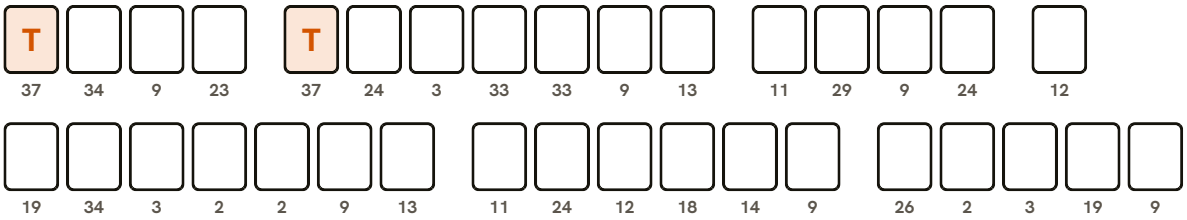
Round 22 to the nearest ten ☐ → D

Scratch space:

CLUE 3 Fractions of a number

> The mascot dropped a box of shiny soccer medals. If we can calculate exactly one third of the medals to return to the teams, we will get the next hint!

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



3/6 of 74 = ☐ → T

3/4 of 44 = ☐ → P

2/6 of 57 = ☐ → C

1/8 of 192 = ☐ → R

1/2 of 26 = ☐ → D

3/4 of 12 = ☐ → E

5/10 of 22 = ☐ → O

1/8 of 96 = ☐ → A

1/4 of 136 = ☐ → H

1/4 of 92 = ☐ → Y

2/4 of 6 = ☐ → I

2/5 of 65 = ☐ → S

6/10 of 30 = ☐ → N

1/8 of 16 = ☐ → L

2/6 of 87 = ☐ → V

2/3 of 21 = ☐ → G

Scratch space:

CLUE 4 Bar model word problems

> The equipment manager drew boxes on a whiteboard to compare the training cones to the soccer balls. Let us solve this bar model puzzle to reveal the next clue!

Draw a bar model to solve each word problem, then write its letter in the boxes to fill in the missing word.

A strand of

W									O		C		P
54	26	129	89	78	40	63	40	26		40		129	

hair turned up at the scene.

There were 63 shiny medals in all. 9 shiny medals were used. How many shiny medals are left?

draw a bar model

Answer: ☐ → W

One group collected 14 soccer balls and another group collected 26 soccer balls. How many soccer balls in all?

draw a bar model

Answer: ☐ → N

The referee has 7 times as many team jerseys as a teammate. The teammate has 9 team jerseys. How many team jerseys does the referee have?

draw a bar model

Answer: ☐ → G

One group collected 56 shiny medals and another group collected 22 shiny medals. How many shiny medals in all?

draw a bar model

Answer: ☐ → I

One group collected 2 practice cones and another group collected 24 practice cones. How many practice cones in all?

draw a bar model

Answer: ☐ → E

One group collected 41 team jerseys and another group collected 88 team jerseys. How many team jerseys in all?

draw a bar model

Answer: ☐ → A

One group collected 78 team jerseys and another group collected 11 team jerseys. How many team jerseys in all?

draw a bar model

Answer: ☐ → R

CLUE 5 Fractions of a number - the last clue

> The laundry room is filled with colorful team bibs. If we find three fourths of the green bibs, we will uncover the final piece of evidence!

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:

2/8 of 4 = ☐	1/8 of 80 = ☐	1/10 of 90 = ☐	2/8 of 28 = ☐
2/10 of 30 = ☐	3/6 of 24 = ☐	2/8 of 12 = ☐	1/3 of 24 = ☐
1/2 of 22 = ☐	1/6 of 12 = ☐	2/10 of 25 = ☐	

Step 2 - cross out the sentence with each answer:

1. The villain calls in an unexpected super-sub, then blows a deafening golden whistle.
2. The villain orders a terrifying high-press defense, then shouts through a loud mega megaphone.
3. The villain launches a lightning counter-attack, then shouts through a loud mega megaphone.
4. The villain orders a terrifying high-press defense, then blows a deafening golden whistle.
5. The villain calls in an unexpected super-sub, then clicks a high-tech smart stopwatch.
6. The villain demonstrates a spectacular bicycle kick, then points a glowing laser clipboard.
7. The villain demonstrates a spectacular bicycle kick, then checks the latest GPS player tracker.
8. The villain runs a flawless tiki-taka drill, then points a glowing laser clipboard.
9. The villain orders a terrifying high-press defense, then checks the latest GPS player tracker.
10. The villain runs a flawless tiki-taka drill, then checks the latest GPS player tracker.
11. The villain launches a lightning counter-attack, then blows a deafening golden whistle.
12. The villain orders a terrifying high-press defense, then clicks a high-tech smart stopwatch.

TEACHER / PARENT

Answer Key

The Great World Cup Ticket Heist

Culprit: Jaime Lozano

High-Press Defense · Golden Whistle · Right-Handed Writer · Wearing Neon Cap · Chilled Orange Slice

Trail: Start 21 → Clue 1 19 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE THIEF DOES NOT USE THE MEGA MEGAPHONE"

12 × 12 = 144 (T) · 2 × 7 = 14 (H) · 9 × 5 = 45 (E) · 11 × 10 = 110 (M) · 4 × 6 = 24 (A) · 6 × 10 = 60 (U) · 11 × 11 = 121 (O) · 1 × 1 = 1 (G) · 1 × 7 = 7 (S) · 10 × 1 = 10 (F) · 2 × 8 = 16 (P) · 11 × 5 = 55 (N) · 11 × 2 = 22 (D) · 8 × 4 = 32 (I)

Clue 2 (Rounding): "THE SUSPECT WRITES WITH THEIR RIGHT HAND"

Round 459 to the nearest hundred = 500 (T) · Round 224 to the nearest hundred = 200 (H) · Round 880 to the nearest hundred = 900 (R) · Round 2,892 to the nearest hundred = 2900 (G) · Round 657 to the nearest hundred = 700 (C) · Round 68 to the nearest ten = 70 (W) · Round 3,662 to the nearest hundred = 3700 (U) · Round 2,274 to the nearest hundred = 2300 (A) · Round 32 to the nearest ten = 30 (E) · Round 7,173 to the nearest thousand = 7000 (I) · Round 109 to the nearest ten = 110 (S) · Round 1,252 to the nearest hundred = 1300 (P) · Round 5,369 to the nearest thousand = 5000 (N) · Round 22 to the nearest ten = 20 (D)

Clue 3 (Fractions of a number): "THEY TRIPPED OVER A CHILLED ORANGE SLICE"

3/6 of 74 = 37 (T) · 3/4 of 44 = 33 (P) · 2/6 of 57 = 19 (C) · 1/8 of 192 = 24 (R) · 1/2 of 26 = 13 (D) · 3/4 of 12 = 9 (E) · 5/10 of 22 = 11 (O) · 1/8 of 96 = 12 (A) · 1/4 of 136 = 34 (H) · 1/4 of 92 = 23 (Y) · 2/4 of 6 = 3 (I) · 2/5 of 65 = 26 (S) · 6/10 of 30 = 18 (N) · 1/8 of 16 = 2 (L) · 2/6 of 87 = 29 (V) · 2/3 of 21 = 14 (G)

Clue 4 (Bar model word problems): "WEARING NEON CAP"

There were 63 shiny medals in all. 9 shiny medals were used. How many shiny medals are left? = 54 (W) · One group collected 14 soccer balls and another group collected 26 soccer balls. How many soccer balls in all? = 40 (N) · The referee has 7 times as many team jerseys as a teammate. The teammate has 9 team jerseys. How many team jerseys does the referee have? = 63 (G) · One group collected 56 shiny medals and another group collected 22 shiny medals. How many shiny medals in all? = 78 (I) · One group collected 2 practice cones and another group collected 24 practice cones. How many practice cones in all? = 26 (E) · One group collected 41 team jerseys and another group collected 88 team jerseys. How many team jerseys in all? = 129 (A) · One group collected 78 team jerseys and another group collected 11 team jerseys. How many team jerseys in all? = 89 (R)

Clue 5 (Fractions of a number): surviving statement is box 4 → Jaime Lozano

2/8 of 4 = 1 · 1/8 of 80 = 10 · 1/10 of 90 = 9 · 2/8 of 28 = 7 · 2/10 of 30 = 6 · 3/6 of 24 = 12 · 2/8 of 12 = 3 · 1/3 of 24 = 8 · 1/2 of 22 = 11 · 1/6 of 12 = 2 · 2/10 of 25 = 5