



The World Cup Ticket Heist

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

Detective: _____ Date: _____

The World Cup final is tonight! But when the ticket vault was opened, it was completely empty. Someone stole every single ticket! The security cameras show a head coach from one of the top teams sneaking in. We must find the thief before kickoff!

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 Thief is _____

Possible suspects

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

NAME	COACHING TACTIC	SIGNATURE GEAR	HABIT	CAP COLOR	DISTRACTION
Marko Mitrovic	High Press	Golden Whistle	Chews Gum	Red Cap	Loud Vuvuzelas
Diego Simeone	Park the Bus	Golden Whistle	Chews Gum	Red Cap	Slippery Mud
Tite	Total Football	Golden Whistle	Spins Whistle	Blue Cap	Squeaky Mascot
Hajime Moriyasu	Park the Bus	Golden Whistle	Chews Gum	Blue Cap	Slippery Mud
Mauricio Pochettino	Park the Bus	Designer Scarf	Spins Whistle	Red Cap	Slippery Mud
Yasuharu Kurata	Counter Attack	Designer Scarf	Chews Gum	Red Cap	Slippery Mud
Bruce Arena	High Press	Smart Watch	Chews Gum	Red Cap	Slippery Mud
Gregg Berhalter	High Press	Golden Whistle	Spins Whistle	Blue Cap	Loud Vuvuzelas
Lionel Scaloni	Counter Attack	Tactical Tablet	Spins Whistle	Red Cap	Loud Vuvuzelas
Tony Gustavsson	Park the Bus	Designer Scarf	Chews Gum	Red Cap	Squeaky Mascot
Laurent Blanc	Counter Attack	Lucky Clipboard	Chews Gum	Green Cap	Squeaky Mascot
Graham Arnold	High Press	Smart Watch	Spins Whistle	Blue Cap	Slippery Mud
Kevin Muscat	High Press	Designer Scarf	Spins Whistle	Blue Cap	Slippery Mud
Marcelo Bielsa	Counter Attack	Golden Whistle	Chews Gum	Blue Cap	Loud Vuvuzelas
Thierry Henry	Total Football	Tactical Tablet	Chews Gum	Blue Cap	Loud Vuvuzelas
Herve Renard	Counter Attack	Golden Whistle	Spins Whistle	Red Cap	Loud Vuvuzelas
Dorival Junior	Counter Attack	Lucky Clipboard	Chews Gum	Red Cap	Slippery Mud
Emma Hayes	Park the Bus	Lucky Clipboard	Chews Gum	Red Cap	Slippery Mud
Futoshi Ikeda	Total Football	Golden Whistle	Chews Gum	Green Cap	Slippery Mud
Mano Menezes	Counter Attack	Smart Watch	Spins Whistle	Red Cap	Slippery Mud
Ange Postecoglou	Total Football	Designer Scarf	Spins Whistle	Green Cap	Squeaky Mascot

CLUE 1

Multiplication facts (1-12)

We found the gear room in a mess. The suspect stacked soccer balls in equal rows. Let us multiply the rows to count the balls and find a clue.

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

T			T											T				
55	108	12	55	108	14	12	3	66	25	12	20	9	25	55	11	20	12	18
			T			T												
20	72	18	96	55	77	18	55	49	108									

$5 \times 11 = \square \rightarrow$ T	$5 \times 5 = \square \rightarrow$ O	$2 \times 7 = \square \rightarrow$ I	$2 \times 6 = \square \rightarrow$ E
$12 \times 8 = \square \rightarrow$ R	$9 \times 1 = \square \rightarrow$ N	$9 \times 12 = \square \rightarrow$ H	
$6 \times 3 = \square \rightarrow$ A	$6 \times 11 = \square \rightarrow$ D	$7 \times 7 = \square \rightarrow$ C	
$11 \times 1 = \square \rightarrow$ U	$4 \times 5 = \square \rightarrow$ S	$6 \times 12 = \square \rightarrow$ M	
$11 \times 7 = \square \rightarrow$ W	$3 \times 1 = \square \rightarrow$ F		

Scratch space:

CLUE 2

Rounding

The stadium security gate has a digital scale. It only shows the suspect's weight rounded to the nearest ten.
Round this number to get the clue.

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

T	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
5000	90	430	20	700	3000	3000	1700	700	9000	1300	90	430	300	3700	30	900	170			

Round 4,962 to the nearest thousand → **T**

Round 3,705 to the nearest hundred → **S**

Round 9,200 to the nearest thousand → **N**

Round 431 to the nearest ten → **E**

Round 91 to the nearest ten → **H**

Round 167 to the nearest ten → **M**

Round 23 to the nearest ten → **V**

Round 875 to the nearest hundred → **U**

Round 1,287 to the nearest hundred → **C**

Round 260 to the nearest hundred → **W**

Round 2,732 to the nearest thousand → **L**

Round 1,686 to the nearest hundred → **A**

Round 724 to the nearest hundred → **I**

Round 29 to the nearest ten → **G**

Scratch space:

CLUE 4

Bar model word problems

The suspect drew two bars on a tactics board to compare training times. Solve the bar model puzzle to see where they went next.

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

R					
---	--	--	--	--	--

 hair turned up at the scene.

73 137 40 39 69 44

The referee has 146 water bottles, packed 2 to a bag. How many bags can be filled?

draw a bar model

Answer: → **R**

The referee used $\frac{1}{3}$ of the soccer balls on the first day. The other 26 soccer balls were used the next day. How many soccer balls were there in all?

draw a bar model

Answer: → **C**

There were 74 soccer balls in all. 5 soccer balls were used. How many soccer balls are left?

draw a bar model

Answer: → **A**

One group collected 54 practice cones and another group collected 83 practice cones. How many practice cones in all?

draw a bar model

Answer: → **E**

The referee has 88 soccer balls, packed 2 to a bag. How many bags can be filled?

draw a bar model

Answer: → **P**

One group collected 22 soccer balls and another group collected 18 soccer balls. How many soccer balls in all?

draw a bar model

Answer: → **D**

CLUE 5**Fractions of a number - the last clue**

The thief left behind a pack of energy bars. A fraction of them were eaten during the escape. Calculate the eaten bars to get the final clue.

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:

$5/10 \text{ of } 24 = \square$

$5/10 \text{ of } 12 = \square$

$1/8 \text{ of } 88 = \square$

$5/10 \text{ of } 2 = \square$

$1/3 \text{ of } 6 = \square$

$1/5 \text{ of } 35 = \square$

$2/10 \text{ of } 45 = \square$

$2/6 \text{ of } 30 = \square$

$3/8 \text{ of } 8 = \square$

$1/8 \text{ of } 32 = \square$

$2/5 \text{ of } 20 = \square$

Step 2 - cross out the sentence with each answer:

1. The villain parked a defensive bus in the hall, then tapped a smart watch.
2. The villain used tiki taka passes to slip inside, then tapped a tactical tablet.
3. The villain ordered a high press on the vault, then dropped a designer scarf.
4. The villain parked a defensive bus in the hall, then dropped a designer scarf.
5. The villain launched a fast counter attack, then dropped a designer scarf.
6. The villain parked a defensive bus in the hall, then shined a golden whistle.
7. The villain launched a fast counter attack, then shined a golden whistle.
8. The villain ordered a high press on the vault, then shined a golden whistle.
9. The villain used tiki taka passes to slip inside, then tapped a smart watch.
10. The villain ordered a high press on the vault, then tapped a smart watch.
11. The villain launched a fast counter attack, then dropped a lucky clipboard.
12. The villain parked a defensive bus in the hall, then dropped a lucky clipboard.

Answer Key

The World Cup Ticket Heist

Culprit: Yasuharu Kurata

Counter Attack · Designer Scarf · Chews Gum · Red Cap · Slippery Mud

Trail: Start 21 → Clue 1 18 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE THIEF DOES NOT USE A SMART WATCH"

$5 \times 11 = 55$ (T) · $5 \times 5 = 25$ (O) · $2 \times 7 = 14$ (I) · $2 \times 6 = 12$ (E) · $12 \times 8 = 96$ (R) · $9 \times 1 = 9$ (N) · $9 \times 12 = 108$ (H) · $6 \times 3 = 18$ (A) · $6 \times 11 = 66$ (D) · $7 \times 7 = 49$ (C) · $11 \times 1 = 11$ (U) · $4 \times 5 = 20$ (S) · $6 \times 12 = 72$ (M) · $11 \times 7 = 77$ (W) · $3 \times 1 = 3$ (F)

Clue 2 (Rounding): "THE VILLAIN CHEWS GUM"

Round 4,962 to the nearest thousand = 5000 (T) · Round 3,705 to the nearest hundred = 3700 (S) · Round 9,200 to the nearest thousand = 9000 (N) · Round 431 to the nearest ten = 430 (E) · Round 91 to the nearest ten = 90 (H) · Round 167 to the nearest ten = 170 (M) · Round 23 to the nearest ten = 20 (V) · Round 875 to the nearest hundred = 900 (U) · Round 1,287 to the nearest hundred = 1300 (C) · Round 260 to the nearest hundred = 300 (W) · Round 2,732 to the nearest thousand = 3000 (L) · Round 1,686 to the nearest hundred = 1700 (A) · Round 724 to the nearest hundred = 700 (I) · Round 29 to the nearest ten = 30 (G)

Clue 3 (Fractions of a number): "SLIPPERY MUD SLOWS THIS PERSON DOWN"

$4/5$ of 5 = 4 (S) · $4/6$ of 30 = 20 (O) · $1/5$ of 60 = 12 (P) · $1/5$ of 25 = 5 (Y) · $2/8$ of 120 = 30 (U) · $3/6$ of 48 = 24 (N) · $1/6$ of 150 = 25 (W) · $1/3$ of 18 = 6 (H) · $2/8$ of 140 = 35 (E) · $4/10$ of 65 = 26 (R) · $3/6$ of 72 = 36 (I) · $1/6$ of 114 = 19 (T) · $1/2$ of 6 = 3 (M) · $5/10$ of 22 = 11 (D) · $1/4$ of 152 = 38 (L)

Clue 4 (Bar model word problems): "RED CAP"

The referee has 146 water bottles, packed 2 to a bag. How many bags can be filled? = 73 (R) · The referee used $1/3$ of the soccer balls on the first day. The other 26 soccer balls were used the next day. How many soccer balls were there in all? = 39 (C) · There were 74 soccer balls in all. 5 soccer balls were used. How many soccer balls are left? = 69 (A) · One group collected 54 practice cones and another group collected 83 practice cones. How many practice cones in all? = 137 (E) · The referee has 88 soccer balls, packed 2 to a bag. How many bags can be filled? = 44 (P) · One group collected 22 soccer balls and another group collected 18 soccer balls. How many soccer balls in all? = 40 (D)

Clue 5 (Fractions of a number): surviving statement is box 5 → Yasuharu Kurata

$5/10$ of 24 = 12 · $5/10$ of 12 = 6 · $1/8$ of 88 = 11 · $5/10$ of 2 = 1 · $1/3$ of 6 = 2 · $1/5$ of 35 = 7 · $2/10$ of 45 = 9 · $2/6$ of 30 = 10 · $3/8$ of 8 = 3 · $1/8$ of 32 = 4 · $2/5$ of 20 = 8