The Great World Cup Ticket Caper

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

Detective: _____ **Date:** _____

The big final match of the World Cup is tonight! But right before kick-off, the Stadium Ticket Manager realized every single ticket to the final match was gone. One of the team coaches must have taken them! We need to follow the clues, solve the math, and find the coach who took the tickets so the fans can get into the stadium.

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

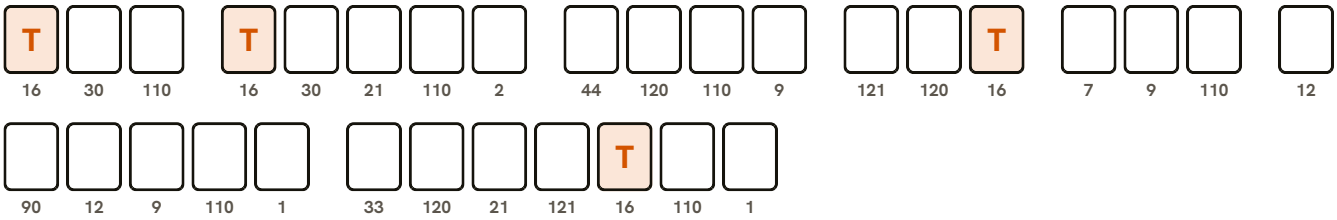
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	COACHING TACTIC	FAVORITE GEAR	WRITING HAND	HAIR OR HAT STYLE	DISTRACTION
Thierry Henry	parking the bus	laser pointer	right handed writer	spiky hair	squeaky soccer ball
Ramon Menezes	wing play	tactical tablet	left handed writer	baseball cap	bright yellow card
Gareth Southgate	high press	golden whistle	left handed writer	baseball cap	bright yellow card
Hajime Moriyasu	wing play	fancy stopwatch	left handed writer	spiky hair	squeaky soccer ball
Steve Holland	wing play	fancy stopwatch	right handed writer	baseball cap	squeaky soccer ball
Hiroshi Nanami	wing play	golden whistle	left handed writer	spiky hair	misty sprinkler
Lee Carsley	tikitaka pass	fancy stopwatch	left handed writer	spiky hair	bright yellow card
B J Callaghan	counter attack	tactical tablet	left handed writer	slicked back hair	squeaky soccer ball
Guy Stephan	parking the bus	fancy stopwatch	left handed writer	baseball cap	bright yellow card
Jaime Lozano	tikitaka pass	golden whistle	right handed writer	baseball cap	bright yellow card
Tony Leone	parking the bus	fancy stopwatch	left handed writer	slicked back hair	bright yellow card
Fernando Diniz	wing play	fancy stopwatch	right handed writer	baseball cap	misty sprinkler
Graham Arnold	high press	laser pointer	left handed writer	baseball cap	bright yellow card
Didier Deschamps	parking the bus	tactical tablet	right handed writer	slicked back hair	misty sprinkler
Walter Samuel	wing play	golden whistle	left handed writer	spiky hair	bright yellow card
Ryoichi Maeda	parking the bus	lucky clipboard	left handed writer	baseball cap	misty sprinkler
Lionel Scaloni	tikitaka pass	tactical tablet	left handed writer	baseball cap	misty sprinkler
Gregg Berhalter	tikitaka pass	laser pointer	left handed writer	baseball cap	misty sprinkler
Tony Vidmar	counter attack	fancy stopwatch	left handed writer	baseball cap	bright yellow card
Pablo Aimar	counter attack	lucky clipboard	right handed writer	spiky hair	bright yellow card
Rene Meulensteen	tikitaka pass	laser pointer	left handed writer	baseball cap	bright yellow card

CLUE 1 Multiplication facts (1-12)

> To search the main coach locker rooms, we must count the training soccer balls. They are kept in equal rows. Let us multiply the rows to get the total.

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



4 × 4 = ☐ → T

5 × 6 = ☐ → H

11 × 4 = ☐ → D

9 × 10 = ☐ → L

1 × 1 = ☐ → R

3 × 7 = ☐ → I

2 × 1 = ☐ → F

11 × 11 = ☐ → N

11 × 3 = ☐ → P

1 × 7 = ☐ → U

12 × 10 = ☐ → O

12 × 1 = ☐ → A

9 × 1 = ☐ → S

10 × 11 = ☐ → E

Scratch space:

CLUE 2 Rounding

> The digital security screen is fuzzy and only displays rounded numbers. Let us round the seat numbers to unlock the camera logs.

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

T			T									T							
30	290	9000	30	290	90	9000	4300	1300	900	1100	30	9000	300	5000	370	7000	2900		
		T		T							T								
1300	90	30	290	30	290	9000	90	900	5000	9000	4300	30	290	370	20	170			

Round 30 to the nearest ten ☐ → T

Round 8,573 to the nearest thousand ☐ → E

Round 291 to the nearest ten ☐ → H

Round 369 to the nearest ten ☐ → A

Round 89 to the nearest ten ☐ → I

Round 18 to the nearest ten ☐ → N

Round 870 to the nearest hundred ☐ → R

Round 6,529 to the nearest thousand ☐ → Y

Round 4,347 to the nearest hundred ☐ → F

Round 335 to the nearest hundred ☐ → P

Round 174 to the nearest ten ☐ → D

Round 1,331 to the nearest hundred ☐ → W

Round 2,924 to the nearest hundred ☐ → S

Round 5,180 to the nearest thousand ☐ → L

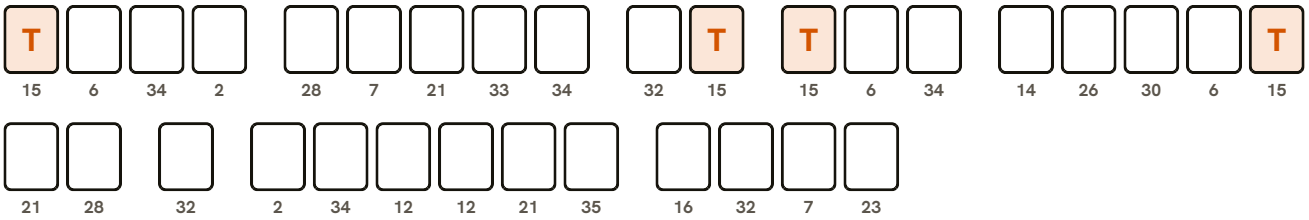
Round 1,111 to the nearest hundred ☐ → O

Scratch space:

CLUE 3 Fractions of a number

> The referee crew has a giant bag of fresh practice jerseys to share. We must calculate a fraction of this number to pass them out correctly.

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



1/4 of 60 = ☐ → T

4/10 of 75 = ☐ → G

1/3 of 63 = ☐ → O

2/3 of 42 = ☐ → F

2/6 of 21 = ☐ → R

1/8 of 112 = ☐ → S

1/2 of 52 = ☐ → I

2/6 of 96 = ☐ → A

1/4 of 140 = ☐ → W

1/3 of 36 = ☐ → L

2/8 of 92 = ☐ → D

4/6 of 3 = ☐ → Y

4/8 of 66 = ☐ → Z

2/5 of 40 = ☐ → C

3/6 of 12 = ☐ → H

4/10 of 85 = ☐ → E

Scratch space:

CLUE 4 Bar models

> Let us compare the warm-up cones used by the different teams. Drawing a bar model will help us see who has more.

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

B				B						
40	13	15	50	40	13	42	42	24	13	26

hair turned up at the scene.

One part is 32 and the other part is 8. What is the whole?

draw a bar model

Answer: ☐ → B

The whole is 50. One part is 8. What is the other part?

draw a bar model

Answer: ☐ → L

One bar shows 37 and the other shows 11. How much longer is the first bar?

draw a bar model

Answer: ☐ → P

One part is 4 and the other part is 20. What is the whole?

draw a bar model

Answer: ☐ → C

One part is 10 and the other part is 3. What is the whole?

draw a bar model

Answer: ☐ → A

One part is 10 and the other part is 40. What is the whole?

draw a bar model

Answer: ☐ → E

One bar shows 16 and the other shows 1. How much longer is the first bar?

draw a bar model

Answer: ☐ → S

CLUE 5 Fractions of a number - the last clue

> The team mascot has a box of shiny tournament keychains. We need to find a fraction of the keychains to give to the stadium staff.

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:

1/4 of 44 = ☐	2/4 of 20 = ☐	4/8 of 18 = ☐	2/8 of 32 = ☐
4/8 of 2 = ☐	1/10 of 40 = ☐	6/8 of 16 = ☐	1/6 of 30 = ☐
3/10 of 10 = ☐	1/8 of 16 = ☐	6/8 of 8 = ☐	

Step 2 - cross out the sentence with each answer:

1. The villain sneaked onto the team bus, then grabbed the sack of final tickets.
2. The villain dashed across the grassy pitch, then swiped the golden ticket box.
3. The villain sneaked onto the team bus, then plucked the tickets from the safe.
4. The villain dashed across the grassy pitch, then plucked the tickets from the safe.
5. The villain slid past the stadium guards, then snatched the official ticket envelope.
6. The villain crept into the locker room, then grabbed the sack of final tickets.
7. The villain dashed across the grassy pitch, then snatched the official ticket envelope.
8. The villain slid past the stadium guards, then stole the ticket manager keys.
9. The villain crept into the locker room, then stole the ticket manager keys.
10. The villain slid past the stadium guards, then swiped the golden ticket box.
11. The villain climbed over the training fence, then stole the ticket manager keys.
12. The villain dashed across the grassy pitch, then grabbed the sack of final tickets.

TEACHER / PARENT

Answer Key

The Great World Cup Ticket Caper

Culprit: Ramon Menezes

wing play · tactical tablet · left handed writer · baseball cap · bright yellow card

Trail: Start 21 → Clue 1 17 → Clue 2 12 → Clue 3 7 → Clue 4 4 → Clue 5 1

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

4 × 4 = 16 (T) · 5 × 6 = 30 (H) · 11 × 4 = 44 (D) · 9 × 10 = 90 (L) · 1 × 1 = 1 (R) · 3 × 7 = 21 (I) · 2 × 1 = 2 (F) · 11 × 11 = 121 (N) · 11 × 3 = 33 (P) · 1 × 7 = 7 (U) · 12 × 10 = 120 (O) · 12 × 1 = 12 (A) · 9 × 1 = 9 (S) · 10 × 11 = 110 (E)

Clue 2 (Rounding): "THE THIEF WROTE PLAYS WITH THEIR LEFT HAND"

Round 30 to the nearest ten = 30 (T) · Round 8,573 to the nearest thousand = 9000 (E) · Round 291 to the nearest ten = 290 (H) · Round 369 to the nearest ten = 370 (A) · Round 89 to the nearest ten = 90 (I) · Round 18 to the nearest ten = 20 (N) · Round 870 to the nearest hundred = 900 (R) · Round 6,529 to the nearest thousand = 7000 (Y) · Round 4,347 to the nearest hundred = 4300 (F) · Round 335 to the nearest hundred = 300 (P) · Round 174 to the nearest ten = 170 (D) · Round 1,331 to the nearest hundred = 1300 (W) · Round 2,924 to the nearest hundred = 2900 (S) · Round 5,180 to the nearest thousand = 5000 (L) · Round 1,111 to the nearest hundred = 1100 (O)

Clue 3 (Fractions of a number): "THEY FROZE AT THE SIGHT OF A YELLOW CARD"

1/4 of 60 = 15 (T) · 4/10 of 75 = 30 (G) · 1/3 of 63 = 21 (O) · 2/3 of 42 = 28 (F) · 2/6 of 21 = 7 (R) · 1/8 of 112 = 14 (S) · 1/2 of 52 = 26 (I) · 2/6 of 96 = 32 (A) · 1/4 of 140 = 35 (W) · 1/3 of 36 = 12 (L) · 2/8 of 92 = 23 (D) · 4/6 of 3 = 2 (Y) · 4/8 of 66 = 33 (Z) · 2/5 of 40 = 16 (C) · 3/6 of 12 = 6 (H) · 4/10 of 85 = 34 (E)

Clue 4 (Bar models): "BASEBALL CAP"

One part is 32 and the other part is 8. What is the whole? = 40 (B) · The whole is 50. One part is 8. What is the other part? = 42 (L) · One bar shows 37 and the other shows 11. How much longer is the first bar? = 26 (P) · One part is 4 and the other part is 20. What is the whole? = 24 (C) · One part is 10 and the other part is 3. What is the whole? = 13 (A) · One part is 10 and the other part is 40. What is the whole? = 50 (E) · One bar shows 16 and the other shows 1. How much longer is the first bar? = 15 (S)

Clue 5 (Fractions of a number): surviving statement is box 7 → Ramon Menezes

1/4 of 44 = 11 · 2/4 of 20 = 10 · 4/8 of 18 = 9 · 2/8 of 32 = 8 · 4/8 of 2 = 1 · 1/10 of 40 = 4 · 6/8 of 16 = 12 · 1/6 of 30 = 5 · 3/10 of 10 = 3 · 1/8 of 16 = 2 · 6/8 of 8 = 6