



The Championship Cup Caper

Grade 6 math · Place value, Percentages, Exponents, Order of operations, Division · Reading level grades 3-4

Detective: _____ Date: _____

The gold Championship Cup is missing from the locker room right before the big final match! A mysterious soccer player snuck past stadium security. We need you to solve the training puzzles and catch 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 rogue kicker 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	LUCKY GEAR	KICKING FOOT	TEAM HAIRSTYLE	TACTICAL WEAKNESS
Antoine	super sonic bicycle kick	silver shin guards	right footed kicker	messy brown hair	bright stadium lights
Megan	gravity defying header	golden soccer cleats	left footed kicker	neon green dyed hair	bright stadium lights
Bukayo	gravity defying header	neon striped socks	left footed kicker	headband over black hair	bright stadium lights
Kylian	super sonic bicycle kick	neon striped socks	right footed kicker	neon green dyed hair	bright stadium lights
Kevin	super sonic bicycle kick	neon striped socks	left footed kicker	headband over black hair	loud referee whistle
Marta	lightning fast sprint	gps tracking wristband	right footed kicker	headband over black hair	loud referee whistle
Neymar	gravity defying header	grip tech goalie gloves	right footed kicker	headband over black hair	bright stadium lights
Harry	hurricane curve shot	grip tech goalie gloves	right footed kicker	neon green dyed hair	soggy muddy grass
Virgil	super sonic bicycle kick	golden soccer cleats	right footed kicker	neon green dyed hair	bright stadium lights
Chloe	shadow dribble slide	gps tracking wristband	right footed kicker	headband over black hair	loud referee whistle
Son	shadow dribble slide	golden soccer cleats	right footed kicker	headband over black hair	loud referee whistle
Wendie	shadow dribble slide	neon striped socks	left footed kicker	headband over black hair	loud referee whistle
Cristiano	super sonic bicycle kick	gps tracking wristband	right footed kicker	headband over black hair	bright stadium lights
Sam	lightning fast sprint	grip tech goalie gloves	right footed kicker	headband over black hair	loud referee whistle
Erling	gravity defying header	neon striped socks	right footed kicker	messy brown hair	loud referee whistle
Jude	hurricane curve shot	golden soccer cleats	left footed kicker	headband over black hair	loud referee whistle
Leo	gravity defying header	gps tracking wristband	right footed kicker	headband over black hair	soggy muddy grass
Mohamed	shadow dribble slide	silver shin guards	right footed kicker	messy brown hair	loud referee whistle
Bruno	gravity defying header	silver shin guards	right footed kicker	headband over black hair	loud referee whistle
Luka	gravity defying header	golden soccer cleats	left footed kicker	headband over black hair	soggy muddy grass
Lucy	super sonic bicycle kick	gps tracking wristband	right footed kicker	messy brown hair	bright stadium lights

CLUE 1 Place value

The stadium scoreboard is flashing weird digits. Look at the place value of the giant numbers to crack the first code.

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

T			T											T				
700	900	4000	700	900	7000	4000	60	600	10	4000	100	300	10	700	50	4000	2000	8000
															T			
1000	10	800	600	4000	300	100	10	500	500	4000	8000	500	800	4000	2000	700	100	

What is the value of the 7 in 584,738? → **T**

What is the value of the 6 in 54,625? → **D**

What is the value of the 1 in 950,124? → **S**

What is the value of the 8 in 18,264? → **R**

What is the value of the 3 in 66,326? → **N**

What is the value of the 8 in 33,829? → **L**

What is the value of the 7 in 957,689? → **I**

What is the value of the 9 in 377,982? → **H**

What is the value of the 1 in 595,218? → **O**

What is the value of the 2 in 32,814? → **A**

What is the value of the 6 in 88,468? → **F**

What is the value of the 1 in 781,709? → **G**

What is the value of the 5 in 64,500? → **C**

What is the value of the 4 in 34,863? → **E**

What is the value of the 5 in 771,658? → **W**

Scratch space:

CLUE 2 Percentages

The coach needs to analyze our team passing percentages. Figure out the stats to unlock the locker room locker.

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

A																		
6	29	29	40	30	8	23	21	13	30	40	31	10	10	40	36	30	10	8

5	23	21	7	40	36	33	8	23	8	41	8	8	5

$10\% \text{ of } 60 = \boxed{} \rightarrow \boxed{\text{A}}$

$20\% \text{ of } 115 = \boxed{} \rightarrow \boxed{\text{R}}$

$25\% \text{ of } 28 = \boxed{} \rightarrow \boxed{\text{N}}$

$10\% \text{ of } 400 = \boxed{} \rightarrow \boxed{\text{T}}$

$40\% \text{ of } 25 = \boxed{} \rightarrow \boxed{\text{O}}$

$25\% \text{ of } 124 = \boxed{} \rightarrow \boxed{\text{F}}$

$10\% \text{ of } 300 = \boxed{} \rightarrow \boxed{\text{H}}$

$50\% \text{ of } 42 = \boxed{} \rightarrow \boxed{\text{I}}$

$10\% \text{ of } 410 = \boxed{} \rightarrow \boxed{\text{D}}$

$20\% \text{ of } 65 = \boxed{} \rightarrow \boxed{\text{G}}$

$25\% \text{ of } 144 = \boxed{} \rightarrow \boxed{\text{S}}$

$50\% \text{ of } 16 = \boxed{} \rightarrow \boxed{\text{E}}$

$20\% \text{ of } 165 = \boxed{} \rightarrow \boxed{\text{W}}$

$5\% \text{ of } 580 = \boxed{} \rightarrow \boxed{\text{L}}$

$10\% \text{ of } 50 = \boxed{} \rightarrow \boxed{\text{P}}$

Scratch space:

CLUE 3 Exponents

Each bounce of the soccer ball multiplies its height. Solve these exponential powers to find where the ball landed.

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

A													A			
25	361	256	4	9	49	8	125	121	27	361	343	128	25	144	343	121

						A										
27	8	343	32	125	361	361	25	125	196	121	27	256	243			

$5^2 = \square \rightarrow$ A	$11^2 = \square \rightarrow$ S	$19^2 = \square \rightarrow$ L	$14^2 = \square \rightarrow$ N
$12^2 = \square \rightarrow$ K	$5^3 = \square \rightarrow$ I	$7^3 = \square \rightarrow$ E	$3^3 = \square \rightarrow$ T
$2^3 = \square \rightarrow$ H	$3^5 = \square \rightarrow$ P	$2^5 = \square \rightarrow$ V	$7^2 = \square \rightarrow$ W
$2^7 = \square \rightarrow$ M	$2^2 = \square \rightarrow$ U	$3^2 = \square \rightarrow$ D	$16^2 = \square \rightarrow$ O

Scratch space:

Order of operations

To run the ultimate training drill we must follow the rules of math order. Solve this equation to get past the gate.

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

A 2x10 grid of boxes. The top row contains the following sequence: 'A' (orange), empty, empty, 'A' (orange), empty, empty, empty, 'A' (orange), empty, empty, empty, 'A' (orange), empty, empty, empty, 'A' (orange), empty, empty. The bottom row contains: empty, empty, empty, empty, empty, empty, 'A' (orange), empty, empty, 'A' (orange), empty, empty, empty, empty, empty, empty, empty, empty. Below each box is a number. The top row numbers are: 6, 39, 35, 6, 10, 9, 76, 6, 32, 41, 27, 47, 41, 6, 8, 20, 22, 6, 27. The bottom row numbers are: 11, 8, 47, 76, 67, 76, 67, 6, 20, 39, 6, 8, 20.

$2 + 2 \times 2 = \square \rightarrow \mathbf{A}$

$$7 \times 2 - 6 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$12 \times 4 - 26 = \boxed{} \rightarrow \boxed{\mathbf{W}}$$

$7 \times 9 - 28 = \boxed{} \rightarrow \boxed{\text{L}}$

$$9 \times 3 - 16 = \boxed{} \rightarrow \boxed{0}$$

$$6 \times 12 - 25 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$2 + 4 \times 2 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$14 + 6 \times 3 = \boxed{} \rightarrow \boxed{\text{I}}$$

$7 \times 10 - 3 = \boxed{} \rightarrow \boxed{\text{E}}$

$10 \times 5 - 9 = \boxed{} \rightarrow \boxed{\text{R}}$

$5 \times 4 - 11 = \boxed{} \rightarrow \boxed{\text{K}}$

$9 \times 4 - 9 = \boxed{} \rightarrow \boxed{\mathbf{S}}$

$$2 + 2 \times 9 = \boxed{} \rightarrow \boxed{\mathbf{D}}$$

$$48 + 4 \times 7 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$4 \times 11 - 5 = \boxed{} \rightarrow \boxed{\mathbf{B}}$$

Scratch space:

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

We need to divide twenty four orange cones evenly among the practice squads. Do the division to reveal the final hiding spot.

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:

$56 \div 8 = \boxed{}$

$66 \div 11 = \boxed{}$

$18 \div 2 = \boxed{}$

$144 \div 12 = \boxed{}$

$33 \div 3 = \boxed{}$

$50 \div 10 = \boxed{}$

$8 \div 1 = \boxed{}$

$120 \div 12 = \boxed{}$

$12 \div 6 = \boxed{}$

$3 \div 3 = \boxed{}$

$30 \div 10 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain dribbles past the stadium guard, then snatches the golden trophy.
2. The villain blasts a ball into the lights, then snatches the golden trophy.
3. The villain dribbles past the stadium guard, then swipes the championship medals.
4. The villain performs a wild bicycle kick, then runs off with the captain armband.
5. The villain blasts a ball into the lights, then hides behind the practice net.
6. The villain sprints across the midfield, then zips away with the team playbook.
7. The villain dribbles past the stadium guard, then hides behind the practice net.
8. The villain sprints across the midfield, then snatches the golden trophy.
9. The villain performs a wild bicycle kick, then hides behind the practice net.
10. The villain blasts a ball into the lights, then zips away with the team playbook.
11. The villain blasts a ball into the lights, then runs off with the captain armband.
12. The villain sprints across the midfield, then runs off with the captain armband.

Answer Key

The Championship Cup Caper

Culprit: Sam

lightning fast sprint · grip tech goalie gloves · right footed kicker · headband over black hair · loud referee whistle

Trail: Start 21 → Clue 1 16 → Clue 2 13 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE THIEF DOES NOT WEAR GOLDEN SOCCER CLEATS"

What is the value of the 7 in 584,738? = 700 (T) · What is the value of the 6 in 54,625? = 600 (D) · What is the value of the 1 in 950,124? = 100 (S) · What is the value of the 8 in 18,264? = 8000 (R) · What is the value of the 3 in 66,326? = 300 (N) · What is the value of the 8 in 33,829? = 800 (L) · What is the value of the 7 in 957,689? = 7000 (I) · What is the value of the 9 in 377,982? = 900 (H) · What is the value of the 1 in 595,218? = 10 (O) · What is the value of the 2 in 32,814? = 2000 (A) · What is the value of the 6 in 88,468? = 60 (F) · What is the value of the 1 in 781,709? = 1000 (G) · What is the value of the 5 in 64,500? = 500 (C) · What is the value of the 4 in 34,863? = 4000 (E) · What is the value of the 5 in 771,658? = 50 (W)

Clue 2 (Percentages): "ALL THE RIGHT FOOT SHOE PRINTS WERE DEEP"

10% of 60 = 6 (A) · 20% of 115 = 23 (R) · 25% of 28 = 7 (N) · 10% of 400 = 40 (T) · 40% of 25 = 10 (O) · 25% of 124 = 31 (F) · 10% of 300 = 30 (H) · 50% of 42 = 21 (I) · 10% of 410 = 41 (D) · 20% of 65 = 13 (G) · 25% of 144 = 36 (S) · 50% of 16 = 8 (E) · 20% of 165 = 33 (W) · 5% of 580 = 29 (L) · 10% of 50 = 5 (P)

Clue 3 (Exponents): "A LOUD WHISTLE MAKES THE VILLAIN STOP"

$5^2 = 25$ (A) · $11^2 = 121$ (S) · $19^2 = 361$ (L) · $14^2 = 196$ (N) · $12^2 = 144$ (K) · $5^3 = 125$ (I) · $7^3 = 343$ (E) · $3^3 = 27$ (T) · $2^3 = 8$ (H) · $3^5 = 243$ (P) · $2^5 = 32$ (V) · $7^2 = 49$ (W) · $2^7 = 128$ (M) · $2^2 = 4$ (U) · $3^2 = 9$ (D) · $16^2 = 256$ (O)

Clue 4 (Order of operations): "A BLACK HAIR STRAND WAS ON THE HEADBAND"

$2 + 2 \times 2 = 6$ (A) · $7 \times 2 - 6 = 8$ (N) · $12 \times 4 - 26 = 22$ (W) · $7 \times 9 - 28 = 35$ (L) · $9 \times 3 - 16 = 11$ (O) · $6 \times 12 - 25 = 47$ (T) · $2 + 4 \times 2 = 10$ (C) · $14 + 6 \times 3 = 32$ (I) · $7 \times 10 - 3 = 67$ (E) · $10 \times 5 - 9 = 41$ (R) · $5 \times 4 - 11 = 9$ (K) · $9 \times 4 - 9 = 27$ (S) · $2 + 2 \times 9 = 20$ (D) · $48 \div 4 \times 7 = 76$ (H) · $4 \times 11 - 5 = 39$ (B)

Clue 5 (Division facts (1-12)): surviving statement is box 4 → Sam

$56 \div 8 = 7$ · $66 \div 11 = 6$ · $18 \div 2 = 9$ · $144 \div 12 = 12$ · $33 \div 3 = 11$ · $50 \div 10 = 5$ · $8 \div 1 = 8$ · $120 \div 12 = 10$ · $12 \div 6 = 2$ · $3 \div 3 = 1$ · $30 \div 10 = 3$