



The Golden Ball Mystery

Grade 1 math · Addition, Subtraction, Skip counting, Place value, Missing addends · Reading level grades 1-2

Detective: _____ Date: _____

Oh no! The shiny Golden Ball trophy is missing from the soccer clubhouse! A sneaky player swiped it right before the big tournament. We need to find the rogue striker!

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 striker is _____

Possible suspects

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

NAME	SUPER MOVE	LUCKY GEAR	FAVORITE FOOT	HAIR STYLE	BIG OBSTACLE
Erling	Laser Pass	Gold Wristband	Left Footed	Spiky Hair	Bright Sun
Bukayo	Super Dribble	Neon Cleats	Right Footed	Curly Ponytail	Sticky Mud
Marta	Power Slide	Gold Wristband	Left Footed	Spiky Hair	Bright Sun
Chloe	Laser Pass	Glow Headband	Right Footed	Curly Ponytail	Loud Whistles
Megan	Power Slide	Shiny Gloves	Right Footed	Spiky Hair	Bright Sun
Virgil	Mega Header	Gold Wristband	Left Footed	Blue Hair Dye	Bright Sun
Sam	Rocket Kick	Glow Headband	Left Footed	Spiky Hair	Bright Sun
Lucy	Super Dribble	Shiny Gloves	Left Footed	Spiky Hair	Bright Sun
Leo	Power Slide	Glow Headband	Right Footed	Spiky Hair	Loud Whistles
Sonny	Mega Header	Pattern Socks	Left Footed	Spiky Hair	Sticky Mud
Jude	Laser Pass	Glow Headband	Left Footed	Spiky Hair	Loud Whistles
Mo	Mega Header	Neon Cleats	Right Footed	Curly Ponytail	Sticky Mud
Ella	Laser Pass	Pattern Socks	Right Footed	Spiky Hair	Loud Whistles
Zlatan	Power Slide	Glow Headband	Left Footed	Blue Hair Dye	Loud Whistles
Kylian	Rocket Kick	Glow Headband	Left Footed	Curly Ponytail	Bright Sun
Lauren	Rocket Kick	Pattern Socks	Left Footed	Spiky Hair	Loud Whistles
Cristiano	Rocket Kick	Gold Wristband	Left Footed	Curly Ponytail	Bright Sun
Mason	Laser Pass	Pattern Socks	Right Footed	Blue Hair Dye	Bright Sun
Keira	Mega Header	Pattern Socks	Left Footed	Spiky Hair	Bright Sun
Marcus	Laser Pass	Gold Wristband	Right Footed	Spiky Hair	Bright Sun
Alex	Laser Pass	Gold Wristband	Right Footed	Curly Ponytail	Bright Sun

CLUE 1 Addition

We need to count all the soccer balls in the bin. Let us add the red balls and the blue balls together.

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

T																T
3	13	7	5	20	12	12	10	20	17	8	14	7	18	17	14	3

						T	T									
19	7	10	9	6	10	3	3	7	9	17	18	14	11	2	18	

$2 + 1 = \square \rightarrow$ T	$7 + 13 = \square \rightarrow$ I	$5 + 3 = \square \rightarrow$ D	$7 + 2 = \square \rightarrow$ R
$5 + 6 = \square \rightarrow$ C	$1 + 1 = \square \rightarrow$ K	$3 + 3 = \square \rightarrow$ P	$10 + 4 = \square \rightarrow$ O
$4 + 6 = \square \rightarrow$ A	$5 + 2 = \square \rightarrow$ E	$8 + 9 = \square \rightarrow$ N	$3 + 10 = \square \rightarrow$ H
$6 + 13 = \square \rightarrow$ W	$13 + 5 = \square \rightarrow$ S	$3 + 2 = \square \rightarrow$ V	
$6 + 6 = \square \rightarrow$ L			

Scratch space:

CLUE 2

Subtraction

Some orange cones went missing from the field. Subtract the ones we found to see how many are still lost.

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

T																			
19	8	12	18	1	9	9	17	1	4	14	1	2	14	16	13	4	9	7	

		T		T					T				T						
15	1	19	8	19	8	12	9	12	5	19	5	13	13	19					

$20 - 1 = \square \rightarrow \boxed{\text{T}}$

$19 - 1 = \square \rightarrow \boxed{\text{V}}$

$18 - 3 = \square \rightarrow \boxed{\text{W}}$

$12 - 8 = \square \rightarrow \boxed{\text{N}}$

$16 - 9 = \square \rightarrow \boxed{\text{Y}}$

$15 - 6 = \square \rightarrow \boxed{\text{L}}$

$15 - 7 = \square \rightarrow \boxed{\text{H}}$

$20 - 4 = \square \rightarrow \boxed{\text{S}}$

$11 - 9 = \square \rightarrow \boxed{\text{C}}$

$20 - 8 = \square \rightarrow \boxed{\text{E}}$

$19 - 5 = \square \rightarrow \boxed{\text{K}}$

$4 - 3 = \square \rightarrow \boxed{\text{I}}$

$20 - 7 = \square \rightarrow \boxed{\text{O}}$

$19 - 2 = \square \rightarrow \boxed{\text{A}}$

$6 - 1 = \square \rightarrow \boxed{\text{F}}$

Scratch space:

CLUE 3

The goalie gloves are kept in neat pairs. Let us count them by twos to find our next clue.

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

Diagram showing two rows of boxes with numbers and a 'T' symbol. The top row has 18 boxes, and the bottom row has 18 boxes. The 'T' symbol is in the 4th box of the top row and the 10th box of the bottom row.

8	100	39	70	8	40	21	24	39	40	120	33	25	12	24	39	65	8	100	39
120	40	21	10	100	8	70	16	20	22	21	8	100	130	100	130	20	65		

Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 → **T**

Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 → **N**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 → **D**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, __, 75, 80 → **S**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 → **G**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 → **U**

Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 → **R**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 → **B**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 →

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 → ☐

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 → **A**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, , 24, 26 → **W**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 → **H**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, __, 26, 28 → **K**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 → **E**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 → **C**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 → **L**

Scratch space:

CLUE 4 Place value

Look at the locker numbers! We need to find the one with five tens and three ones.

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

A				A															
52	59	83	84	52	13	30	33	76	59	48	23	75	29	46	52	23	84		
	A																		
18	52	59	59	83	26	47	75	83	33	83	46	43	48	33	59	83			

What number has 5 tens and 2 ones? → **A**

What number has 7 tens and 6 ones? → **F**

What number has 4 tens and 6 ones? → **H**

What number has 4 tens and 8 ones? → **P**

What number has 2 tens and 3 ones? → **I**

What number has 1 ten and 8 ones? → **W**

What number has 4 tens and 3 ones? → **E**

What number has 3 tens and 3 ones? → **O**

What number has 7 tens and 5 ones? → **K**

What number has 2 tens and 6 ones? → **U**

What number has 2 tens and 9 ones? → **Y**

What number has 5 tens and 9 ones? → **S**

What number has 4 tens and 7 ones? → **C**

What number has 3 tens and 0 ones? → **D**

What number has 1 ten and 3 ones? → **N**

What number has 8 tens and 4 ones? → **R**

What number has 8 tens and 3 ones? → **T**

Scratch space:

CLUE 5**Missing addends - the last clue**

We have eight water bottles but we need ten. How many more do we need to make a full set?

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:

$9 + \underline{\quad} = 18$

$2 + \underline{\quad} = 10$

$1 + \underline{\quad} = 8$

$1 + \underline{\quad} = 12$

$2 + \underline{\quad} = 14$

$7 + \underline{\quad} = 12$

$6 + \underline{\quad} = 7$

$5 + \underline{\quad} = 9$

$5 + \underline{\quad} = 15$

$6 + \underline{\quad} = 8$

$6 + \underline{\quad} = 9$

Step 2 - cross out the sentence with each answer:

1. The villain passed the ball to distract the guard, then flashed a bright glow headband.
2. The villain slid under the turnstile, then ran off wearing neon cleats.
3. The villain passed the ball to distract the guard, then grabbed the trophy with shiny gloves.
4. The villain dribbled past the heavy front gate, then ran off wearing neon cleats.
5. The villain headered the ball over the tall fence, then flashed a bright glow headband.
6. The villain slid under the turnstile, then grabbed the trophy with shiny gloves.
7. The villain dribbled past the heavy front gate, then shined a gold wristband in the dark.
8. The villain passed the ball to distract the guard, then shined a gold wristband in the dark.
9. The villain kicked a soccer ball through the window, then flashed a bright glow headband.
10. The villain slid under the turnstile, then dashed away in pattern socks.
11. The villain dribbled past the heavy front gate, then dashed away in pattern socks.
12. The villain slid under the turnstile, then flashed a bright glow headband.

Answer Key

The Golden Ball Mystery

Culprit: Lucy

Super Dribble · Shiny Gloves · Left Footed · Spiky Hair · Bright Sun

Trail: Start 21 → Clue 1 16 → Clue 2 9 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT WEAR PATTERN SOCKS"

$2 + 1 = 3$ (T) · $7 + 13 = 20$ (I) · $5 + 3 = 8$ (D) · $7 + 2 = 9$ (R) · $5 + 6 = 11$ (C) · $1 + 1 = 2$ (K) · $3 + 3 = 6$ (P) · $10 + 4 = 14$ (O) · $4 + 6 = 10$ (A) · $5 + 2 = 7$ (E) · $8 + 9 = 17$ (N) · $3 + 10 = 13$ (H) · $6 + 13 = 19$ (W) · $13 + 5 = 18$ (S) · $3 + 2 = 5$ (V) · $6 + 6 = 12$ (L)

Clue 2 (Subtraction): "THE VILLAIN KICKS ONLY WITH THE LEFT FOOT"

$20 - 1 = 19$ (T) · $19 - 1 = 18$ (V) · $18 - 3 = 15$ (W) · $12 - 8 = 4$ (N) · $16 - 9 = 7$ (Y) · $15 - 6 = 9$ (L) · $15 - 7 = 8$ (H) · $20 - 4 = 16$ (S) · $11 - 9 = 2$ (C) · $20 - 8 = 12$ (E) · $19 - 5 = 14$ (K) · $4 - 3 = 1$ (I) · $20 - 7 = 13$ (O) · $19 - 2 = 17$ (A) · $6 - 1 = 5$ (F)

Clue 3 (Skip counting): "THE STRIKER BLOCKED THE BRIGHT SUN WITH A HAND"

Skip-count by 2s. Fill the blank: $2, 4, 6, \underline{\quad}, 10, 12 = 8$ (T) · Skip-count by 5s. Fill the blank: $5, 10, 15, \underline{\quad}, 25, 30 = 20$ (N) · Skip-count by 5s. Fill the blank: $5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, \underline{\quad}, 70, 75 = 65$ (D) · Skip-count by 5s. Fill the blank: $5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, \underline{\quad}, 75, 80 = 70$ (S) · Skip-count by 2s. Fill the blank: $2, 4, 6, 8, \underline{\quad}, 12, 14 = 10$ (G) · Skip-count by 2s. Fill the blank: $2, 4, 6, 8, 10, 12, 14, \underline{\quad}, 18, 20 = 16$ (U) · Skip-count by 10s. Fill the blank: $10, 20, 30, \underline{\quad}, 50, 60 = 40$ (R) · Skip-count by 10s. Fill the blank: $10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, \underline{\quad}, 130, 140 = 120$ (B) · Skip-count by 3s. Fill the blank: $3, 6, 9, 12, 15, 18, \underline{\quad}, 24, 27 = 21$ (I) · Skip-count by 5s. Fill the blank: $5, 10, 15, 20, \underline{\quad}, 30, 35 = 25$ (O) · Skip-count by 10s. Fill the blank: $10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, \underline{\quad}, 140, 150 = 130$ (A) · Skip-count by 2s. Fill the blank: $2, 4, 6, 8, 10, 12, 14, 16, 18, 20, \underline{\quad}, 24, 26 = 22$ (W) · Skip-count by 10s. Fill the blank: $10, 20, 30, 40, 50, 60, 70, 80, 90, \underline{\quad}, 110, 120 = 100$ (H) · Skip-count by 2s. Fill the blank: $2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, \underline{\quad}, 26, 28 = 24$ (K) · Skip-count by 3s. Fill the blank: $3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, \underline{\quad}, 42, 45 = 39$ (E) · Skip-count by 2s. Fill the blank: $2, 4, 6, 8, 10, \underline{\quad}, 14, 16 = 12$ (C) · Skip-count by 3s. Fill the blank: $3, 6, 9, 12, 15, 18, 21, 24, 27, 30, \underline{\quad}, 36, 39 = 33$ (L)

Clue 4 (Place value): "A STRAND OF SPIKY HAIR WAS STUCK TO THE POST"

What number has 5 tens and 2 ones? = 52 (A) · What number has 7 tens and 6 ones? = 76 (F) · What number has 4 tens and 6 ones? = 46 (H) · What number has 4 tens and 8 ones? = 48 (P) · What number has 2 tens and 3 ones? = 23 (I) · What number has 1 ten and 8 ones? = 18 (W) · What number has 4 tens and 3 ones? = 43 (E) · What number has 3 tens and 3 ones? = 33 (O) · What number has 7 tens and 5 ones? = 75 (K) · What number has 2 tens and 6 ones? = 26 (U) · What number has 2 tens and 9 ones? = 29 (Y) · What number has 5 tens and 9 ones? = 59 (S) · What number has 4 tens and 7 ones? = 47 (C) · What number has 3 tens and 0 ones? = 30 (D) · What number has 1 ten and 3 ones? = 13 (N) · What number has 8 tens and 4 ones? = 84 (R) · What number has 8 tens and 3 ones? = 83 (T)

Clue 5 (Missing addends): surviving statement is box 6 → Lucy

$9 + \underline{\quad} = 18 = 9$ · $2 + \underline{\quad} = 10 = 8$ · $1 + \underline{\quad} = 8 = 7$ · $1 + \underline{\quad} = 12 = 11$ · $2 + \underline{\quad} = 14 = 12$ · $7 + \underline{\quad} = 12 = 5$ · $6 + \underline{\quad} = 7 = 1$ · $5 + \underline{\quad} = 9 = 4$ · $5 + \underline{\quad} = 15 = 10$ · $6 + \underline{\quad} = 8 = 2$ · $6 + \underline{\quad} = 9 = 3$