



The Cup Cake Caper

Grade 1 math · Addition, Subtraction, Skip counting, Place value, Missing addends · Reading level grades 3-4

Detective: _____ Date: _____

The championship trophy has vanished right before the big final! A mysterious soccer player called the Penalty Phantom swiped it from the center circle. The Chief Referee needs your help to check the team rosters 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 The Penalty Phantom 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 CHARM	DOMINANT FOOT	HAIR COLOR	FEAR
Marcus	Banana Shot	Striped Socks	Left-Footed	Pitch Black	Soggy Grass
Wendie	Slide Tackle	Golden Whistle	Right-Footed	Pitch Black	Loud Whistles
Cristiano	Header	Golden Whistle	Right-Footed	Neon Green	Red Cards
Robert	Header	Neon Shinguards	Right-Footed	Neon Green	Loud Whistles
Megan	Header	Headband	Left-Footed	Neon Green	Soggy Grass
Luka	Header	Golden Whistle	Left-Footed	Pitch Black	Soggy Grass
Erling	Bicycle Kick	Headband	Right-Footed	Bright Orange	Soggy Grass
Neymar	Banana Shot	Wrist Sweatband	Left-Footed	Pitch Black	Loud Whistles
Karim	Volley	Striped Socks	Right-Footed	Bright Orange	Soggy Grass
Sonny	Banana Shot	Headband	Right-Footed	Neon Green	Red Cards
Mohamed	Bicycle Kick	Wrist Sweatband	Left-Footed	Bright Orange	Red Cards
Alisha	Header	Headband	Left-Footed	Pitch Black	Soggy Grass
Rose	Slide Tackle	Striped Socks	Right-Footed	Bright Orange	Red Cards
Lionel	Header	Neon Shinguards	Right-Footed	Pitch Black	Loud Whistles
Alex	Volley	Headband	Right-Footed	Bright Orange	Soggy Grass
Jude	Banana Shot	Neon Shinguards	Left-Footed	Bright Orange	Soggy Grass
Martha	Banana Shot	Striped Socks	Right-Footed	Pitch Black	Soggy Grass
Lucy	Slide Tackle	Wrist Sweatband	Left-Footed	Bright Orange	Soggy Grass
Kylian	Header	Golden Whistle	Left-Footed	Neon Green	Red Cards
Chloe	Bicycle Kick	Neon Shinguards	Left-Footed	Pitch Black	Soggy Grass
Kevin	Slide Tackle	Wrist Sweatband	Left-Footed	Pitch Black	Soggy Grass

CLUE 1 Addition

Coach counted the training cones. First, she found a pile of them by the bench. Then she added the cones left on the pitch. Together, they gave a clue!

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

T			T																	
19	4	16	19	4	11	16	14	2	8	16	17	10	8	19	13	16	20	18		
20	4	16	20	2	9	20	10	2												

$11 + 8 = \square \rightarrow \text{T}$	$1 + 3 = \square \rightarrow \text{H}$	$5 + 9 = \square \rightarrow \text{F}$	$2 + 6 = \square \rightarrow \text{O}$
$9 + 7 = \square \rightarrow \text{E}$	$12 + 6 = \square \rightarrow \text{R}$	$1 + 1 = \square \rightarrow \text{D}$	
$6 + 11 = \square \rightarrow \text{S}$	$4 + 9 = \square \rightarrow \text{W}$	$9 + 11 = \square \rightarrow \text{A}$	
$3 + 6 = \square \rightarrow \text{B}$	$3 + 8 = \square \rightarrow \text{I}$	$6 + 4 = \square \rightarrow \text{N}$	

Scratch space:

CLUE 2 Subtraction

The ball boy had a big sack of soccer balls, but some rolled away into the goal. Subtracting the lost balls revealed a mysterious note stuck to the sack!

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

T						T				T					T			
11	10	8	7	8	18	11	18	4	4	11	6	13	19	14	11	1	9	12
						T												
16	8	8	6	19	14	11	10	8	5	2	16							

18 - 7 = → T	9 - 7 = → U	16 - 4 = → S	18 - 5 = → R
10 - 3 = → L	13 - 5 = → E	20 - 2 = → F	9 - 3 = → P
6 - 2 = → O	6 - 5 = → W	18 - 4 = → N	11 - 6 = → M
15 - 6 = → A	17 - 7 = → H	20 - 1 = → I	
17 - 1 = → D			

Scratch space:

CLUE 3 Skip counting

We counted the cleats on the shoe rack by twos. Skip counting the shoes helped us spot a weird muddy footprint leading to the locker room!

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

T			T															
15	80	90	15	80	110	90	35	33	10	110	8	8	90	20	30	12	20	
						T												
35	90	10	10	36	12	15	80	90	33	36	14	14	55	14	27	30	33	33

Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 → **T**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 → **O**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 → **H**

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 → **F**

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 → **D**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 → **G**

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

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 → **I**

Scratch space:

CLUE 4 Place value

The digital scoreboard flickered, showing tens and ones instead of the score. Reading the place value unlocked a hidden camera file!

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

W																	
74	12	25	86	20	63	71	37	36	95	41	78	62	31	93	37	78	35
62	37	95	14	86	63	41	62	12	36	86	80	41					

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

What number has 8 tens and 0 ones? → **S**

What number has 8 tens and 6 ones? → **O**

What number has 1 ten and 4 ones? → **R**

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

What number has 3 tens and 6 ones? → **P**

What number has 3 tens and 5 ones? → **K**

What number has 3 tens and 7 ones? → **A**

What number has 2 tens and 0 ones? → **U**

What number has 6 tens and 3 ones? → **N**

What number has 3 tens and 1 one? → **B**

What number has 7 tens and 1 one? → **D**

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

What number has 4 tens and 1 one? → **T**

What number has 1 ten and 2 ones? → **E**

What number has 9 tens and 3 ones? → **L**

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

What number has 7 tens and 8 ones? → **C**

Scratch space:

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

The team water bottles were half-empty. We knew how many we started with, and finding the missing bottles led us straight to a scrap of jersey!

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:

$7 + \underline{\quad} = 10$

$5 + \underline{\quad} = 11$

$1 + \underline{\quad} = 5$

$3 + \underline{\quad} = 12$

$2 + \underline{\quad} = 13$

$6 + \underline{\quad} = 14$

$2 + \underline{\quad} = 4$

$9 + \underline{\quad} = 14$

$6 + \underline{\quad} = 16$

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

$4 + \underline{\quad} = 16$

Step 2 - cross out the sentence with each answer:

1. The villain blasted a volley, then blew a golden whistle.
2. The villain did a bicycle kick, then fixed their headband.
3. The villain made a slide tackle, then wiped their face with a wrist sweatband.
4. The villain kicked a banana shot, then pulled up their striped socks.
5. The villain blasted a volley, then wiped their face with a wrist sweatband.
6. The villain scored with a header, then blew a golden whistle.
7. The villain did a bicycle kick, then adjusted their neon shinguards.
8. The villain scored with a header, then wiped their face with a wrist sweatband.
9. The villain kicked a banana shot, then adjusted their neon shinguards.
10. The villain did a bicycle kick, then wiped their face with a wrist sweatband.
11. The villain scored with a header, then adjusted their neon shinguards.
12. The villain scored with a header, then pulled up their striped socks.

Answer Key

The Cup Cake Caper

Culprit: Chloe

Bicycle Kick · Neon Shinguards · Left-Footed · Pitch Black · Soggy Grass

Trail: Start 21 → Clue 1 16 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT WEAR A HEADBAND"

$11 + 8 = 19$ (T) · $1 + 3 = 4$ (H) · $5 + 9 = 14$ (F) · $2 + 6 = 8$ (O) · $9 + 7 = 16$ (E) · $12 + 6 = 18$ (R) · $1 + 1 = 2$ (D) · $6 + 11 = 17$ (S) · $4 + 9 = 13$ (W) · $9 + 11 = 20$ (A) · $3 + 6 = 9$ (B) · $3 + 8 = 11$ (I) · $6 + 4 = 10$ (N)

Clue 2 (Subtraction): "THE LEFT FOOT PRINT WAS DEEP IN THE MUD"

$18 - 7 = 11$ (T) · $9 - 7 = 2$ (U) · $16 - 4 = 12$ (S) · $18 - 5 = 13$ (R) · $10 - 3 = 7$ (L) · $13 - 5 = 8$ (E) · $20 - 2 = 18$ (F) · $9 - 3 = 6$ (P) · $6 - 2 = 4$ (O) · $6 - 5 = 1$ (W) · $18 - 4 = 14$ (N) · $11 - 6 = 5$ (M) · $15 - 6 = 9$ (A) · $17 - 7 = 10$ (H) · $20 - 1 = 19$ (I) · $17 - 1 = 16$ (D)

Clue 3 (Skip counting): "THE THIEF SLIPPED AND FELL ON THE SOGGY GRASS"

Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 = 15 (T) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, __, 33, 36 = 30 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (O) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (F) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (Y) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 = 12 (N) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 = 20 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 = 14 (G) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (E) · Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 = 8 (P) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (L) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (I)

Clue 4 (Place value): "WE FOUND A PITCH BLACK HAIR ON THE POST"

What number has 7 tens and 4 ones? = 74 (W) · What number has 8 tens and 0 ones? = 80 (S) · What number has 8 tens and 6 ones? = 86 (O) · What number has 1 ten and 4 ones? = 14 (R) · What number has 6 tens and 2 ones? = 62 (H) · What number has 3 tens and 6 ones? = 36 (P) · What number has 3 tens and 5 ones? = 35 (K) · What number has 3 tens and 7 ones? = 37 (A) · What number has 2 tens and 0 ones? = 20 (U) · What number has 6 tens and 3 ones? = 63 (N) · What number has 3 tens and 1 one? = 31 (B) · What number has 7 tens and 1 one? = 71 (D) · What number has 2 tens and 5 ones? = 25 (F) · What number has 4 tens and 1 one? = 41 (T) · What number has 1 ten and 2 ones? = 12 (E) · What number has 9 tens and 3 ones? = 93 (L) · What number has 9 tens and 5 ones? = 95 (I) · What number has 7 tens and 8 ones? = 78 (C)

Clue 5 (Missing addends): surviving statement is box 7 → Chloe

$7 + \underline{\quad} = 10 = 3$ · $5 + \underline{\quad} = 11 = 6$ · $1 + \underline{\quad} = 5 = 4$ · $3 + \underline{\quad} = 12 = 9$ · $2 + \underline{\quad} = 13 = 11$ · $6 + \underline{\quad} = 14 = 8$ · $2 + \underline{\quad} = 4 = 2$ · $9 + \underline{\quad} = 14 = 5$ · $6 + \underline{\quad} = 16 = 10$ · $6 + \underline{\quad} = 7 = 1$ · $4 + \underline{\quad} = 16 = 12$