



The Championship Cup Mystery

Grade 5 math · Multiplication, Subtraction, Addition, Fractions of a number, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

The Golden Championship Cup has vanished from the Grand Stadium trophy case right before the big game! The only clue left behind is a muddy soccer jersey. Coach Ben and the Thunderbolts need your help to track down the Phantom Striker 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 Phantom Striker 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	DOMINANT FOOT	HAIR COLOR	TACTICAL WEAKNESS
Kevin	Rocket Header	Grip Headband	Right Footed	Neon Green	Flat Soccer Ball
Sonny	Rocket Header	Power Gloves	Right Footed	Neon Green	Loud Whistle
Leo	Tornado Kick	Laser Visor	Right Footed	Bright Orange	Flat Soccer Ball
Chloe	Phantom Dribble	Golden Cleats	Right Footed	Bright Orange	Flat Soccer Ball
Marcus	Phantom Dribble	Speed Socks	Right Footed	Neon Green	Muddy Pitch
Cristiano	Gravity Save	Grip Headband	Right Footed	Blue Streak	Loud Whistle
Harry	Gravity Save	Golden Cleats	Right Footed	Bright Orange	Loud Whistle
Alisha	Shield Tackle	Laser Visor	Right Footed	Blue Streak	Loud Whistle
Marta	Rocket Header	Grip Headband	Right Footed	Neon Green	Muddy Pitch
Neymar	Gravity Save	Laser Visor	Right Footed	Neon Green	Loud Whistle
Lucy	Tornado Kick	Speed Socks	Right Footed	Neon Green	Loud Whistle
Sophia	Shield Tackle	Power Gloves	Left Footed	Neon Green	Loud Whistle
Wendie	Shield Tackle	Grip Headband	Right Footed	Bright Orange	Loud Whistle
Sam	Phantom Dribble	Speed Socks	Left Footed	Neon Green	Loud Whistle
Rose	Gravity Save	Grip Headband	Right Footed	Neon Green	Muddy Pitch
Kylian	Tornado Kick	Laser Visor	Right Footed	Neon Green	Loud Whistle
Mo	Tornado Kick	Golden Cleats	Left Footed	Blue Streak	Muddy Pitch
Bukayo	Phantom Dribble	Laser Visor	Right Footed	Neon Green	Flat Soccer Ball
Luka	Tornado Kick	Grip Headband	Left Footed	Blue Streak	Flat Soccer Ball
Erling	Rocket Header	Speed Socks	Right Footed	Neon Green	Loud Whistle
Trinity	Rocket Header	Speed Socks	Left Footed	Bright Orange	Loud Whistle

CLUE 1
Multiplication facts (1-12)

Coach Ben counts rows of practice cones on the field. He multiplies the rows to find the total and spots a strange note.

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

T																			
22	44	5	30	33	5	6	15	10	48	1	64	64	6	1	33	9	66	5	30
		T																	
33	66	22	99	5	6	70	77	66	99	5	70	21	64	66	48	5	30		

$11 \times 2 = \square \rightarrow$ T	$6 \times 1 = \square \rightarrow$ A	$6 \times 5 = \square \rightarrow$ S	
$7 \times 11 = \square \rightarrow$ P	$9 \times 1 = \square \rightarrow$ D	$10 \times 1 = \square \rightarrow$ Y	
$4 \times 11 = \square \rightarrow$ H	$10 \times 7 = \square \rightarrow$ R	$11 \times 9 = \square \rightarrow$ W	
$11 \times 3 = \square \rightarrow$ N	$5 \times 3 = \square \rightarrow$ K	$11 \times 6 = \square \rightarrow$ O	
$6 \times 8 = \square \rightarrow$ V	$1 \times 1 = \square \rightarrow$ I	$3 \times 7 = \square \rightarrow$ G	$5 \times 1 = \square \rightarrow$ E
$8 \times 8 = \square \rightarrow$ L			

Scratch space:

CLUE 2

The team check their water supply before the match. Subtracting the empty bottles reveals a secret clue hidden in the crate.

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

8340 4019 8703 3228 5657 1209 1209 8703 3228 5803 8451 6980 5803 2051 3877 8451 8340 4019

8340 4019 8703 8451 3228 3228 8451 6011 4019 8340 8599 7524 7524 8340

$$10952 - 2612 = \boxed{} \rightarrow \boxed{\text{T}}$$

$6397 - 386 = \boxed{} \rightarrow \boxed{\text{G}}$

$$4153 - 2102 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$6577 - 2558 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$6041 - 2813 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$9060 - 1536 = \boxed{} \rightarrow \boxed{0}$$

$$10298 - 4641 = \boxed{} \rightarrow \boxed{\text{U}}$$

$9606 - 903 = \boxed{} \rightarrow \boxed{\text{E}}$

$11485 - 2886 = \boxed{} \rightarrow \boxed{\text{F}}$

$$5490 - 1613 = \boxed{} \rightarrow \boxed{\text{W}}$$

$10309 - 4506 = \boxed{} \rightarrow \boxed{\text{K}}$

$$5320 - 4111 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$10852 - 2401 = \boxed{} \rightarrow \boxed{I}$$

$$8345 - 1365 = \boxed{} \rightarrow \boxed{\text{C}}$$

Scratch space:

CLUE 3

We gather the team pennies from the laundry bins. Adding up the piles helps us find a scrap of paper left in a pocket.

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

The diagram illustrates a sequence of numbers and their corresponding 'True' (T) or 'False' (F) states. The top row contains 13 boxes, and the bottom row contains 8 boxes. The numbers below the boxes are: 6759, 6587, 7547, 6687, 4397, 4814, 7097, 7097, 8061, 9619, 7547, 7547, 3964, 7547, 4994, 6759, 4994. The boxes containing 'T' are at positions 1, 15, and 9.

Row	Box	Number	State
Top Row	1	6759	T
	2	6587	F
	3	7547	F
	4	6687	F
	5	4397	F
	6	4814	F
	7	7097	F
	8	7097	F
	9	8061	F
	10	9619	F
	11	7547	F
	12	7547	F
	13	3964	F
Bottom Row	1	7097	F
	2	7270	F
	3	9843	F
	4	7485	F
	5	4397	F
	6	6587	F
	7	4814	F
	8	6876	F

$$2642 + 4455 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$4584 + 2003 = \boxed{} \rightarrow \mathbf{H}$$

$$3985 + 3500 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$5490 + 2571 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$2523 + 5024 = \boxed{} \rightarrow \boxed{\text{E}}$$

Scratch space:

CLUE 4
Fractions of a number

Only a fraction of the stadium lights are turned on. Finding that fraction reveals a code painted on the turf.

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

N			N					N								N			
3	13	9	3	8	27	13	13	3	17	14	7	27	10	2	27	14	3	33	10

					N				N		
15	13	27	13	9	3	2	17	13	3	13	2

$2/8 \text{ of } 12 = \square \rightarrow \boxed{\text{N}}$

$2/8 \text{ of } 68 = \square \rightarrow \boxed{\text{H}}$

$2/6 \text{ of } 24 = \square \rightarrow \boxed{\text{G}}$

$6/10 \text{ of } 55 = \square \rightarrow \boxed{\text{D}}$

$1/4 \text{ of } 52 = \square \rightarrow \boxed{\text{E}}$

$4/10 \text{ of } 25 = \square \rightarrow \boxed{\text{S}}$

$2/4 \text{ of } 14 = \square \rightarrow \boxed{\text{I}}$

$1/10 \text{ of } 90 = \square \rightarrow \boxed{\text{O}}$

$1/5 \text{ of } 70 = \square \rightarrow \boxed{\text{A}}$

$6/10 \text{ of } 25 = \square \rightarrow \boxed{\text{W}}$

$3/4 \text{ of } 36 = \square \rightarrow \boxed{\text{R}}$

$1/10 \text{ of } 20 = \square \rightarrow \boxed{\text{T}}$

Scratch space:

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

We divide the squad into equal drill groups. Splitting them up helps us notice a key piece of evidence left by the goals.

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:

$8 \div 8 = \boxed{}$

$8 \div 2 = \boxed{}$

$18 \div 9 = \boxed{}$

$9 \div 3 = \boxed{}$

$55 \div 11 = \boxed{}$

$60 \div 10 = \boxed{}$

$32 \div 4 = \boxed{}$

$14 \div 2 = \boxed{}$

$60 \div 6 = \boxed{}$

$144 \div 12 = \boxed{}$

$66 \div 6 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain powers in a rocket header, then adjusts their neon speed socks.
2. The villain unleashes a wild tornado kick, then adjusts their neon speed socks.
3. The villain executes a sneaky phantom dribble, then adjusts their neon speed socks.
4. The villain performs a spectacular gravity save, then adjusts their high-tech laser visor.
5. The villain slides in with a shield tackle, then adjusts their neon speed socks.
6. The villain powers in a rocket header, then adjusts their high-tech laser visor.
7. The villain powers in a rocket header, then tightens their lucky grip headband.
8. The villain powers in a rocket header, then pulls on their snug power gloves.
9. The villain unleashes a wild tornado kick, then adjusts their high-tech laser visor.
10. The villain performs a spectacular gravity save, then pulls on their snug power gloves.
11. The villain executes a sneaky phantom dribble, then polishes their flashy golden cleats.
12. The villain performs a spectacular gravity save, then adjusts their neon speed socks.

Answer Key

The Championship Cup Mystery

Culprit: Kylian

Tornado Kick · Laser Visor · Right Footed · Neon Green · Loud Whistle

Trail: Start 21 → Clue 1 19 → Clue 2 15 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE SNEAKY VILLAIN DOES NOT WEAR POWER GLOVES"

$11 \times 2 = 22$ (T) · $6 \times 1 = 6$ (A) · $6 \times 5 = 30$ (S) · $7 \times 11 = 77$ (P) · $9 \times 1 = 9$ (D) · $10 \times 1 = 10$ (Y) · $4 \times 11 = 44$ (H) · $10 \times 7 = 70$ (R) · $11 \times 9 = 99$ (W) · $11 \times 3 = 33$ (N) · $5 \times 3 = 15$ (K) · $11 \times 6 = 66$ (O) · $6 \times 8 = 48$ (V) · $1 \times 1 = 1$ (I) · $3 \times 7 = 21$ (G) · $5 \times 1 = 5$ (E) · $8 \times 8 = 64$ (L)

Clue 2 (Subtraction): "THE RUNNER KICKS WITH THEIR RIGHT FOOT"

$10952 - 2612 = 8340$ (T) · $6397 - 386 = 6011$ (G) · $4153 - 2102 = 2051$ (S) · $6577 - 2558 = 4019$ (H) · $6041 - 2813 = 3228$ (R) · $9060 - 1536 = 7524$ (O) · $10298 - 4641 = 5657$ (U) · $9606 - 903 = 8703$ (E) · $11485 - 2886 = 8599$ (F) · $5490 - 1613 = 3877$ (W) · $10309 - 4506 = 5803$ (K) · $5320 - 4111 = 1209$ (N) · $10852 - 2401 = 8451$ (I) · $8345 - 1365 = 6980$ (C)

Clue 3 (Addition): "THEY WILL FREEZE AT A LOUD WHISTLE"

$4349 + 2410 = 6759$ (T) · $4232 + 5387 = 9619$ (R) · $2642 + 4455 = 7097$ (L) · $3370 + 3317 = 6687$ (Y) · $3295 + 3975 = 7270$ (O) · $4584 + 2003 = 6587$ (H) · $2519 + 1878 = 4397$ (W) · $5393 + 4450 = 9843$ (U) · $3985 + 3500 = 7485$ (D) · $3670 + 3206 = 6876$ (S) · $2021 + 1943 = 3964$ (Z) · $5490 + 2571 = 8061$ (F) · $2572 + 2422 = 4994$ (A) · $3240 + 1574 = 4814$ (I) · $2523 + 5024 = 7547$ (E)

Clue 4 (Fractions of a number): "NEON GREEN HAIR STRANDS WERE ON THE NET"

$\frac{2}{8}$ of 12 = 3 (N) · $\frac{2}{8}$ of 68 = 17 (H) · $\frac{2}{6}$ of 24 = 8 (G) · $\frac{6}{10}$ of 55 = 33 (D) · $\frac{1}{4}$ of 52 = 13 (E) · $\frac{4}{10}$ of 25 = 10 (S) · $\frac{2}{4}$ of 14 = 7 (I) · $\frac{1}{10}$ of 90 = 9 (O) · $\frac{1}{5}$ of 70 = 14 (A) · $\frac{6}{10}$ of 25 = 15 (W) · $\frac{3}{4}$ of 36 = 27 (R) · $\frac{1}{10}$ of 20 = 2 (T)

Clue 5 (Division facts (1-12)): surviving statement is box 9 → Kylian

$8 \div 8 = 1$ · $8 \div 2 = 4$ · $18 \div 9 = 2$ · $9 \div 3 = 3$ · $55 \div 11 = 5$ · $60 \div 10 = 6$ · $32 \div 4 = 8$ · $14 \div 2 = 7$ · $60 \div 6 = 10$ · $144 \div 12 = 12$ · $66 \div 6 = 11$