The Golden Cleat Mystery

Grade 3 math · Rounding, Addition, Subtraction, Multiplication, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

The golden cleat is missing from the trophy room. The star player cannot play without it. Search the locker room for clues to stop the thief.

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 winger is _____

Possible suspects

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

NAME	SOCCER SKILL	EQUIPMENT TYPE	PLAYER TYPE	HAIR COLOR	GAME DISTRACTION
Wes	Shooting	Wristband	Girl	Blonde	Loud Crowd
Tia	Tackling	Headband	Girl	Blonde	Loud Crowd
Sam	Shooting	Headband	Girl	Brown	Ref Whistle
Gwen	Passing	Shin Guard	Girl	Brown	Loud Crowd
Rex	Dribbling	Headband	Boy	Black	Ref Whistle
Ola	Shooting	Scarf	Girl	Blonde	Ref Whistle
Quin	Passing	Headband	Boy	Brown	Loud Crowd
Dan	Passing	Scarf	Boy	Black	Loud Crowd
Leo	Dribbling	Scarf	Girl	Blonde	Hungry Pigeons
Finn	Tackling	Water Bottle	Boy	Blonde	Hungry Pigeons
Jack	Tackling	Wristband	Girl	Blonde	Loud Crowd
Zoe	Dribbling	Shin Guard	Girl	Blonde	Loud Crowd
Cole	Passing	Shin Guard	Girl	Blonde	Ref Whistle
Kai	Dribbling	Water Bottle	Boy	Blonde	Loud Crowd
Eve	Passing	Water Bottle	Boy	Blonde	Loud Crowd
Ace	Shooting	Scarf	Boy	Blonde	Hungry Pigeons
Ned	Passing	Scarf	Boy	Blonde	Loud Crowd
Pat	Shooting	Scarf	Boy	Blonde	Ref Whistle
Udo	Tackling	Shin Guard	Boy	Black	Hungry Pigeons
Ivy	Passing	Wristband	Girl	Blonde	Loud Crowd
Val	Dribbling	Headband	Girl	Black	Hungry Pigeons

CLUE 1 Rounding

The scoreboard glitch rounds the total points so we check the first rule

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

T			T											T					
400	800	700	400	800	70	700	900	4000	30	700	7000	5000	30	400	6000	700	600	20	

600	800	700	600	4000	50	600	5000	4000

Round 441 to the nearest hundred		T	Round 3,529 to the nearest thousand		D	Round 69 to the nearest ten		I
Round 19 to the nearest ten		R	Round 31 to the nearest ten		O	Round 891 to the nearest hundred		F
Round 7,030 to the nearest thousand		S	Round 5,276 to the nearest thousand		N	Round 584 to the nearest hundred		A
Round 689 to the nearest hundred		E	Round 6,083 to the nearest thousand		W	Round 50 to the nearest ten		B
Round 813 to the nearest hundred		H						

Scratch space:

CLUE 2 Addition

I added up all the lost water bottles to find our first big hint

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

T					T														
353	673	248	205	948	353	636	248	790	790	790	543	205	543	830	561	599	636	648	

								T	
648	948	718	701	718	599	636	693	543	790	353

173 + 180 =		T	298 + 492 =		S	289 + 404 =		F
264 + 409 =		H	416 + 232 =		G	127 + 78 =		W
196 + 403 =		U	428 + 520 =		I	159 + 89 =		E
538 + 292 =		Y	331 + 305 =		N	214 + 487 =		L
301 + 260 =		O	454 + 264 =		R	360 + 183 =		A

Scratch space:

CLUE 3 Subtraction

We took the total goal count minus the ones scored to isolate the weakness

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

A											A						
104	422	403	703	108	159	256	403	325	108	187	104	108	413	652	882	413

652	882	642	413	433	652	256	642	610

474 - 370 =		A	392 - 136 =		R	637 - 215 =		L
479 - 292 =		M	1031 - 379 =		T	755 - 352 =		O
433 - 108 =		W	774 - 132 =		I	381 - 222 =		C
921 - 311 =		P	1267 - 385 =		H	833 - 130 =		U
771 - 358 =		E	814 - 381 =		F	484 - 376 =		D

Scratch space:

CLUE 4 Multiplication facts (1-12)

Four rows of lockers each had three lockers and our clue is tucked away

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

B																	
96	63	14	5	7	24	6	11	54	144	5	7	6	63	144	45	14	5

11	4	24	27	54	144	6	6

12 × 8 =		B	12 × 2 =		E	7 × 1 =		D
9 × 3 =		G	2 × 2 =		H	9 × 5 =		Y
11 × 1 =		T	12 × 12 =		A	3 × 2 =		S
9 × 7 =		L	1 × 5 =		N	2 × 7 =		O
9 × 6 =		R					

Scratch space:

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

Dividing the team into two groups reveals the hair color at the exit

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:

50 ÷ 10 = ☐	20 ÷ 2 = ☐	42 ÷ 6 = ☐
14 ÷ 7 = ☐	48 ÷ 4 = ☐	16 ÷ 4 = ☐
12 ÷ 12 = ☐	30 ÷ 5 = ☐	27 ÷ 9 = ☐
132 ÷ 12 = ☐	56 ÷ 7 = ☐	

Step 2 - cross out the sentence with each answer:

1. The villain slides on turf, then dashes to the bus.
2. The villain dives for cover, then hides the prize.
3. The villain dives for cover, then jumps the wall.
4. The villain steals the trophy, then dashes to the bus.
5. The villain kicks the ball, then locks the door.
6. The villain trips the guard, then jumps the wall.
7. The villain slides on turf, then locks the door.
8. The villain dives for cover, then dashes to the bus.
9. The villain steals the trophy, then locks the door.
10. The villain trips the guard, then hides the prize.
11. The villain steals the trophy, then runs away fast.
12. The villain steals the trophy, then jumps the wall.

TEACHER / PARENT

Answer Key

The Golden Cleat Mystery

Culprit: Ivy

Passing · Wristband · Girl · Blonde · Loud Crowd

Trail: Start 21 → Clue 1 16 → Clue 2 8 → Clue 3 5 → Clue 4 4 → Clue 5 1

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

Round 441 to the nearest hundred = 400 (T) · Round 3,529 to the nearest thousand = 4000 (D) · Round 69 to the nearest ten = 70 (I) · Round 19 to the nearest ten = 20 (R) · Round 31 to the nearest ten = 30 (O) · Round 891 to the nearest hundred = 900 (F) · Round 7,030 to the nearest thousand = 7000 (S) · Round 5,276 to the nearest thousand = 5000 (N) · Round 584 to the nearest hundred = 600 (A) · Round 689 to the nearest hundred = 700 (E) · Round 6,083 to the nearest thousand = 6000 (W) · Round 50 to the nearest ten = 50 (B) · Round 813 to the nearest hundred = 800 (H)

Clue 2 (Addition): "THE WITNESS SAW A YOUNG GIRL RUN FAST"

173 + 180 = 353 (T) · 298 + 492 = 790 (S) · 289 + 404 = 693 (F) · 264 + 409 = 673 (H) · 416 + 232 = 648 (G) · 127 + 78 = 205 (W) · 196 + 403 = 599 (U) · 428 + 520 = 948 (I) · 159 + 89 = 248 (E) · 538 + 292 = 830 (Y) · 331 + 305 = 636 (N) · 214 + 487 = 701 (L) · 301 + 260 = 561 (O) · 454 + 264 = 718 (R) · 360 + 183 = 543 (A)

Clue 3 (Subtraction): "A LOUD CROWD MADE THE THIEF TRIP"

474 - 370 = 104 (A) · 392 - 136 = 256 (R) · 637 - 215 = 422 (L) · 479 - 292 = 187 (M) · 1031 - 379 = 652 (T) · 755 - 352 = 403 (O) · 433 - 108 = 325 (W) · 774 - 132 = 642 (I) · 381 - 222 = 159 (C) · 921 - 311 = 610 (P) · 1267 - 385 = 882 (H) · 833 - 130 = 703 (U) · 771 - 358 = 413 (E) · 814 - 381 = 433 (F) · 484 - 376 = 108 (D)

Clue 4 (Multiplication facts (1-12)): "BLONDE STRANDS LAY ON THE GRASS"

12 × 8 = 96 (B) · 12 × 2 = 24 (E) · 7 × 1 = 7 (D) · 9 × 3 = 27 (G) · 2 × 2 = 4 (H) · 9 × 5 = 45 (Y) · 11 × 1 = 11 (T) · 12 × 12 = 144 (A) · 3 × 2 = 6 (S) · 9 × 7 = 63 (L) · 1 × 5 = 5 (N) · 2 × 7 = 14 (O) · 9 × 6 = 54 (R)

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

50 ÷ 10 = 5 · 20 ÷ 2 = 10 · 42 ÷ 6 = 7 · 14 ÷ 7 = 2 · 48 ÷ 4 = 12 · 16 ÷ 4 = 4 · 12 ÷ 12 = 1 · 30 ÷ 5 = 6 · 27 ÷ 9 = 3 · 132 ÷ 12 = 11 · 56 ÷ 7 = 8