



The Bloodline Bowl Mystery

Grade 10 math · Pythagorean theorem, Bar models, Word problems, Square roots, Missing addends · Reading level grades 7-9

Detective: _____ Date: _____

The Tribal Chief's sacred Golden Ula Fala Helmet has been swiped from the trophy case right before the kickoff of the Bloodline Bowl! The stadium is locked down, and the culprits are still on the field. It is up to you to decode the stadium clues, analyze the playbook math, and find out who betrayed the family.

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 player is _____

Possible suspects

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

NAME	SIGNATURE PLAY	LOCKER GEAR	GLOVE PREFERENCE	HAIRSTYLE	FIELD HAZARD
Seth Rollins	Superman Punch	Golden Visor	Right Hand Glove	Tight Braids	Loud Airhorns
Tanga Loa	Superman Punch	Red Lei Cleats	Right Hand Glove	Tight Braids	Loud Airhorns
Randy Orton	Samoan Spike	Finger Tape	Left Hand Glove	Tight Braids	Slippery Turf
Drew McIntyre	Guillotine Choke	Red Lei Cleats	Left Hand Glove	Slicked Bun	Blinding Stadium Lights
Kevin Owens	Samoan Spike	Ula Fala Towel	Left Hand Glove	Tight Braids	Loud Airhorns
Umaga	Superman Punch	Finger Tape	Left Hand Glove	Shaved Undercut	Loud Airhorns
Afa Anoa	Spear Tackle	Red Lei Cleats	Left Hand Glove	Shaved Undercut	Blinding Stadium Lights
Bobby Lashley	Samoan Spike	Ula Fala Towel	Right Hand Glove	Slicked Bun	Blinding Stadium Lights
Dusty Rhodes	Guillotine Choke	Golden Visor	Left Hand Glove	Tight Braids	Loud Airhorns
Paul Heyman	Superman Punch	Tribal Arm Sleeve	Left Hand Glove	Shaved Undercut	Blinding Stadium Lights
LA Knight	Uso Splash	Red Lei Cleats	Right Hand Glove	Slicked Bun	Blinding Stadium Lights
Yokozuna	Samoan Spike	Red Lei Cleats	Left Hand Glove	Tight Braids	Blinding Stadium Lights
Roman Reigns	Spear Tackle	Tribal Arm Sleeve	Right Hand Glove	Tight Braids	Blinding Stadium Lights
Jimmy Uso	Guillotine Choke	Tribal Arm Sleeve	Right Hand Glove	Shaved Undercut	Blinding Stadium Lights
Cody Rhodes	Uso Splash	Ula Fala Towel	Left Hand Glove	Tight Braids	Slippery Turf
Sami Zayn	Spear Tackle	Red Lei Cleats	Right Hand Glove	Slicked Bun	Blinding Stadium Lights
Jacob Fatu	Uso Splash	Red Lei Cleats	Right Hand Glove	Shaved Undercut	Slippery Turf
Jey Uso	Uso Splash	Tribal Arm Sleeve	Left Hand Glove	Tight Braids	Loud Airhorns
Tama Tonga	Superman Punch	Finger Tape	Left Hand Glove	Tight Braids	Loud Airhorns
Rikishi	Samoan Spike	Finger Tape	Right Hand Glove	Slicked Bun	Blinding Stadium Lights
The Rock	Superman Punch	Red Lei Cleats	Left Hand Glove	Tight Braids	Loud Airhorns

CLUE 1

Pythagorean theorem

The stadium guards need help counting the team gear. Help them finish the daily inventory worksheet to unlock the first set of camera logs.

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

T										T								T
100	10	125	13	111	13	5	125	40	100	74	87	125	13	82	87	100		
						T												
26	125	52	58	52	100	58	37	15	52	41	13	41	125	125	65	125		

legs 28 and 96, hypotenuse = → **T**

legs 3 and 4, hypotenuse = → **P**

legs 12 and 35, hypotenuse = → **I**

legs 18 and 80, hypotenuse = → **N**

legs 9 and 12, hypotenuse = → **B**

legs 24 and 32, hypotenuse = → **C**

legs 5 and 12, hypotenuse = → **S**

legs 36 and 105, hypotenuse = → **U**

legs 6 and 8, hypotenuse = → **H**

legs 9 and 40, hypotenuse = → **L**

legs 10 and 24, hypotenuse = → **W**

legs 40 and 42, hypotenuse = → **R**

legs 35 and 120, hypotenuse = → **E**

legs 25 and 60, hypotenuse = → **V**

legs 20 and 48, hypotenuse = → **A**

legs 24 and 70, hypotenuse = → **D**

legs 60 and 63, hypotenuse = → **O**

Scratch space:

CLUE 2

Bar model word problems

Our coach is drawing comparison bars to compare player sprint times on the big screen. Complete the bar models to reveal the scout report.

Draw a bar model to solve each word problem, then write its letter in the boxes to fill in the missing word.

A witness saw the villain was L D G L O V .

81 77 87 140 78 118 110 81 77

One group collected 66 helmets and another group collected 15 helmets. How many helmets in all?

draw a bar model

Answer: → L

One group collected 56 whistles and another group collected 31 whistles. How many whistles in all?

draw a bar model

Answer: → F

One group collected 102 footballs and another group collected 38 footballs. How many footballs in all?

draw a bar model

Answer: → T

Quarterback has 220 whistles, packed 2 to a bag. How many bags can be filled?

draw a bar model

Answer: → N

Quarterback used $\frac{1}{2}$ of the water bottles on the first day. The other 59 water bottles were used the next day. How many water bottles were there in all?

draw a bar model

Answer: → A

There were 103 water bottles in all. 25 water bottles were used. How many water bottles are left?

draw a bar model

Answer: → H

One group collected 25 whistles and another group collected 52 whistles. How many whistles in all?

draw a bar model

Answer: → E

CLUE 3

Word problems

The quarterback threw a long pass from the corner of the field to the opposite side. Work out the diagonal distance of the ball's flight to track the runner.

Solve each problem, then write its letter in the boxes to fill in the missing word.

Someone scared the villain off with L H N S .

7 96 46 19 40 15 22 96 22

There were 46 whistles. 39 were used up. How many whistles are left?

Answer: → L

Quarterback found 32 whistles yesterday and 14 more today. How many whistles in all?

Answer: → U

Quarterback lined up 8 rows of 12 footballs. How many footballs in all?

Answer: → O

There were 45 whistles. 5 were used up. How many whistles are left?

Answer: → A

There were 30 cleats. 11 were used up. How many cleats are left?

Answer: → D

Quarterback lined up 3 rows of 5 cleats. How many cleats in all?

Answer: → I

Quarterback found 10 cleats yesterday and 12 more today. How many cleats in all?

Answer: → R

Scratch space:

CLUE 4 Square roots

The championship trophy is locked inside a square glass case on the fifty-yard line. Solve for the square root of the base area to open the lock.

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

W																	
20	23	15	14	19	13	12	10	8	4	5	10	22	16	21	8	12	2
14	13	10	5	23	5	23	7	9	23	10							

$\sqrt{400} = \square \rightarrow \text{W}$	$\sqrt{100} = \square \rightarrow \text{T}$	$\sqrt{49} = \square \rightarrow \text{L}$
$\sqrt{81} = \square \rightarrow \text{M}$	$\sqrt{484} = \square \rightarrow \text{B}$	$\sqrt{361} = \square \rightarrow \text{U}$
$\sqrt{256} = \square \rightarrow \text{R}$	$\sqrt{25} = \square \rightarrow \text{H}$	$\sqrt{64} = \square \rightarrow \text{I}$
$\sqrt{169} = \square \rightarrow \text{N}$	$\sqrt{441} = \square \rightarrow \text{A}$	$\sqrt{16} = \square \rightarrow \text{G}$
$\sqrt{196} = \square \rightarrow \text{O}$	$\sqrt{4} = \square \rightarrow \text{S}$	$\sqrt{144} = \square \rightarrow \text{D}$
$\sqrt{225} = \square \rightarrow \text{F}$	$\sqrt{529} = \square \rightarrow \text{E}$	

Scratch space:

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

The locker room manager has a list of total jerseys but some numbers are missing. Find the missing values to get the final piece of evidence.

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:

$28 + \underline{\quad} = 31$

$27 + \underline{\quad} = 36$

$39 + \underline{\quad} = 40$

$34 + \underline{\quad} = 38$

$27 + \underline{\quad} = 39$

$24 + \underline{\quad} = 30$

$29 + \underline{\quad} = 39$

$36 + \underline{\quad} = 47$

$19 + \underline{\quad} = 26$

$26 + \underline{\quad} = 31$

$4 + \underline{\quad} = 6$

Step 2 - cross out the sentence with each answer:

1. The villain blitzed through the defensive line, then vanished into the VIP lounge.
2. The villain sacked the starting quarterback, then escaped through the press box.
3. The villain fumbled the golden game ball, then escaped through the press box.
4. The villain intercepted the championship pass, then hid in the concession stand.
5. The villain intercepted the championship pass, then sprinted into the locker room.
6. The villain sacked the starting quarterback, then hid in the concession stand.
7. The villain scored a seventy yard touchdown, then hid in the concession stand.
8. The villain sacked the starting quarterback, then sprinted into the locker room.
9. The villain sacked the starting quarterback, then leaped over the stadium wall.
10. The villain fumbled the golden game ball, then sprinted into the locker room.
11. The villain sacked the starting quarterback, then vanished into the VIP lounge.
12. The villain scored a seventy yard touchdown, then sprinted into the locker room.

Answer Key

The Bloodline Bowl Mystery

Culprit: The Rock

Superman Punch · Red Lei Cleats · Left Hand Glove · Tight Braids · Loud Airhorns

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Pythagorean theorem): "THE SUSPECT DOES NOT WEAR A TRIBAL SLEEVE"

legs 28 and 96, hypotenuse = 100 (T) · legs 3 and 4, hypotenuse = 5 (P) · legs 12 and 35, hypotenuse = 37 (I) · legs 18 and 80, hypotenuse = 82 (N) · legs 9 and 12, hypotenuse = 15 (B) · legs 24 and 32, hypotenuse = 40 (C) · legs 5 and 12, hypotenuse = 13 (S) · legs 36 and 105, hypotenuse = 111 (U) · legs 6 and 8, hypotenuse = 10 (H) · legs 9 and 40, hypotenuse = 41 (L) · legs 10 and 24, hypotenuse = 26 (W) · legs 40 and 42, hypotenuse = 58 (R) · legs 35 and 120, hypotenuse = 125 (E) · legs 25 and 60, hypotenuse = 65 (V) · legs 20 and 48, hypotenuse = 52 (A) · legs 24 and 70, hypotenuse = 74 (D) · legs 60 and 63, hypotenuse = 87 (O)

Clue 2 (Bar model word problems): "LEFT HAND GLOVE"

One group collected 66 helmets and another group collected 15 helmets. How many helmets in all? = 81 (L) · One group collected 56 whistles and another group collected 31 whistles. How many whistles in all? = 87 (F) · One group collected 102 footballs and another group collected 38 footballs. How many footballs in all? = 140 (T) · Quarterback has 220 whistles, packed 2 to a bag. How many bags can be filled? = 110 (N) · Quarterback used $\frac{1}{2}$ of the water bottles on the first day. The other 59 water bottles were used the next day. How many water bottles were there in all? = 118 (A) · There were 103 water bottles in all. 25 water bottles were used. How many water bottles are left? = 78 (H) · One group collected 25 whistles and another group collected 52 whistles. How many whistles in all? = 77 (E)

Clue 3 (Word problems): "LOUD AIRHORNS"

There were 46 whistles. 39 were used up. How many whistles are left? = 7 (L) · Quarterback found 32 whistles yesterday and 14 more today. How many whistles in all? = 46 (U) · Quarterback lined up 8 rows of 12 footballs. How many footballs in all? = 96 (O) · There were 45 whistles. 5 were used up. How many whistles are left? = 40 (A) · There were 30 cleats. 11 were used up. How many cleats are left? = 19 (D) · Quarterback lined up 3 rows of 5 cleats. How many cleats in all? = 15 (I) · Quarterback found 10 cleats yesterday and 12 more today. How many cleats in all? = 22 (R)

Clue 4 (Square roots): "WE FOUND TIGHT BRAIDS ON THE HELMET"

$\sqrt{400} = 20$ (W) · $\sqrt{100} = 10$ (T) · $\sqrt{49} = 7$ (L) · $\sqrt{81} = 9$ (M) · $\sqrt{484} = 22$ (B) · $\sqrt{361} = 19$ (U) · $\sqrt{256} = 16$ (R) · $\sqrt{25} = 5$ (H) · $\sqrt{64} = 8$ (I) · $\sqrt{169} = 13$ (N) · $\sqrt{441} = 21$ (A) · $\sqrt{16} = 4$ (G) · $\sqrt{196} = 14$ (O) · $\sqrt{4} = 2$ (S) · $\sqrt{144} = 12$ (D) · $\sqrt{225} = 15$ (F) · $\sqrt{529} = 23$ (E)

Clue 5 (Missing addends): surviving statement is box 8 → The Rock

$28 + \underline{\quad} = 31 = 3$ · $27 + \underline{\quad} = 36 = 9$ · $39 + \underline{\quad} = 40 = 1$ · $34 + \underline{\quad} = 38 = 4$ · $27 + \underline{\quad} = 39 = 12$ · $24 + \underline{\quad} = 30 = 6$ · $29 + \underline{\quad} = 39 = 10$ · $36 + \underline{\quad} = 47 = 11$ · $19 + \underline{\quad} = 26 = 7$ · $26 + \underline{\quad} = 31 = 5$ · $4 + \underline{\quad} = 6 = 2$