The Missing All-Star Trophy

Grade 5 math · Fractions of a number, Order of operations, Multiplication, Rounding, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

During the ultimate Football and Basketball showdown at Apex Dome, the championship trophy disappeared right off center court! The culprit left behind playbook notes, equipment traces, and strange game tactics. Use the clues to track down the thief before the final buzzer.

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 trophy thief is _____

Possible suspects

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

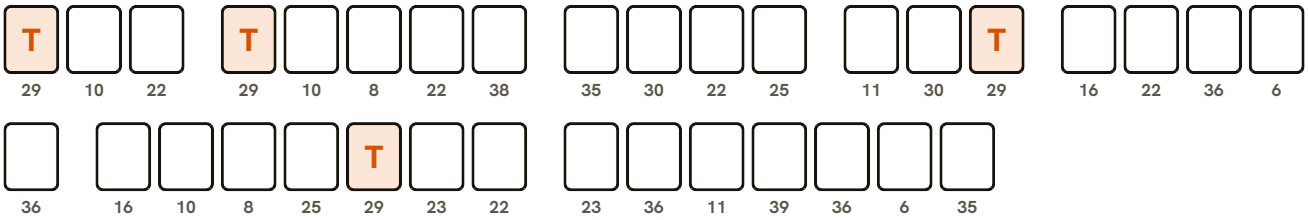
NAME	SIGNATURE MOVE	FAVORITE GEAR	STANCE	HEADWEAR	DISTRACTION
Caitlin Marsh	Crossover Dribble	Padded Arm Sleeve	Left Handed	Red Cap	Bright Flashbulbs
Elena Cruz	Hail Mary Pass	High Top Sneakers	Left Handed	Black Visor	Loud Whistles
Patrick Stone	Crossover Dribble	Padded Arm Sleeve	Right Handed	Red Cap	Slippery Floors
Kobe Miller	Hail Mary Pass	Grip Gloves	Right Handed	Black Visor	Loud Whistles
LeBron Jackson	Spin Move	Grip Gloves	Right Handed	Black Visor	Loud Whistles
Steph Parker	Spin Move	High Top Sneakers	Right Handed	Red Cap	Loud Whistles
Deion Hayes	Speed Burst	High Top Sneakers	Right Handed	Black Visor	Slippery Floors
Travis Bell	Hail Mary Pass	High Top Sneakers	Right Handed	Black Visor	Loud Whistles
Shaq Taylor	Hail Mary Pass	High Top Sneakers	Right Handed	Black Visor	Bright Flashbulbs
Ja Bennett	Hail Mary Pass	Padded Arm Sleeve	Left Handed	Red Cap	Slippery Floors
Devin Vance	Spin Move	Padded Arm Sleeve	Right Handed	Black Visor	Bright Flashbulbs
Jordan Davis	Hail Mary Pass	Padded Arm Sleeve	Left Handed	Black Visor	Bright Flashbulbs
Aja Wilson	Speed Burst	High Top Sneakers	Left Handed	Gold Helmet	Bright Flashbulbs
Trey Youngblood	Hail Mary Pass	Padded Arm Sleeve	Right Handed	Gold Helmet	Loud Whistles
Giannis Reed	Crossover Dribble	Headband	Right Handed	Black Visor	Slippery Floors
Maya Lin	Three Point Shot	Whistle Lanyard	Right Handed	Red Cap	Slippery Floors
Luka Rivers	Speed Burst	Headband	Right Handed	Black Visor	Loud Whistles
Serena Brooks	Three Point Shot	Padded Arm Sleeve	Left Handed	Gold Helmet	Bright Flashbulbs
Marcus Carter	Hail Mary Pass	Headband	Left Handed	Red Cap	Slippery Floors
Jalen Knight	Hail Mary Pass	Headband	Right Handed	Black Visor	Slippery Floors
Dak Morgan	Crossover Dribble	Whistle Lanyard	Right Handed	Black Visor	Loud Whistles

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CLUE 1 Fractions of a number

> Coach Taylor analyzed the team roster sheet to find out how many players missed practice. Taking a fraction of the total roster revealed a secret message.

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



1/3 of 87 = ☐ → T

1/5 of 40 = ☐ → I

5/8 of 56 = ☐ → D

1/4 of 156 = ☐ → Y

1/5 of 30 = ☐ → R

1/3 of 114 = ☐ → F

1/5 of 150 = ☐ → O

5/10 of 32 = ☐ → W

3/10 of 120 = ☐ → A

5/6 of 30 = ☐ → S

3/6 of 20 = ☐ → H

2/3 of 33 = ☐ → E

1/3 of 69 = ☐ → L

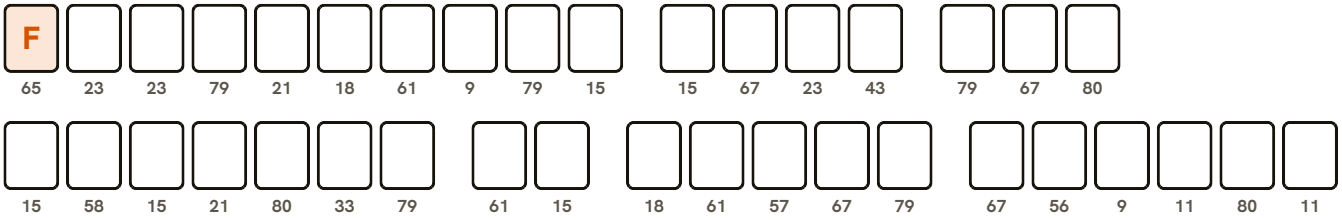
2/8 of 44 = ☐ → N

Scratch space:

CLUE 2 Order of operations

The stat tracker solved the multi-step scoreboard equation to uncover the locker room door code.

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



7 × 11 - 12 = ☐ → F

1 + 2 × 5 = ☐ → D

6 × 12 - 5 = ☐ → H

8 + 6 × 8 = ☐ → A

13 + 5 × 2 = ☐ → O

6 × 11 - 9 = ☐ → G

7 + 2 × 4 = ☐ → S

9 + 8 × 3 = ☐ → C

3 × 10 - 9 = ☐ → P

16 + 8 × 8 = ☐ → E

23 + 5 × 7 = ☐ → U

5 × 9 - 2 = ☐ → W

33 + 4 × 7 = ☐ → I

3 + 2 × 3 = ☐ → N

5 × 9 - 27 = ☐ → R

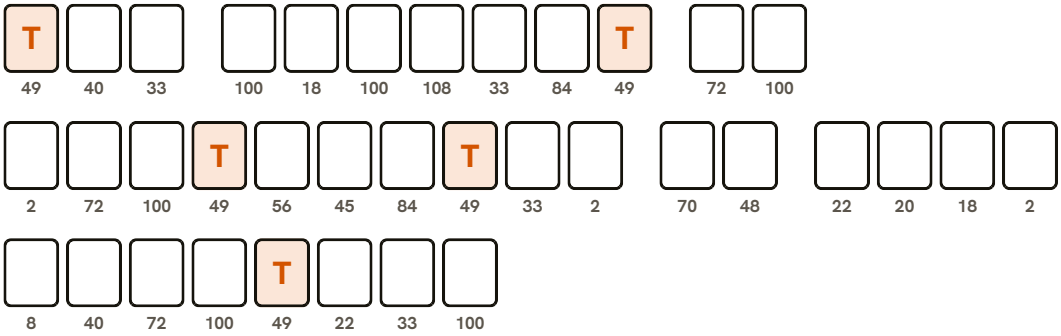
10 × 8 - 1 = ☐ → T

Scratch space:

CLUE 3 Multiplication facts (1-12)

Coach Miller calculated the total basketballs stored across five equal racks in the gymnasium vault.

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



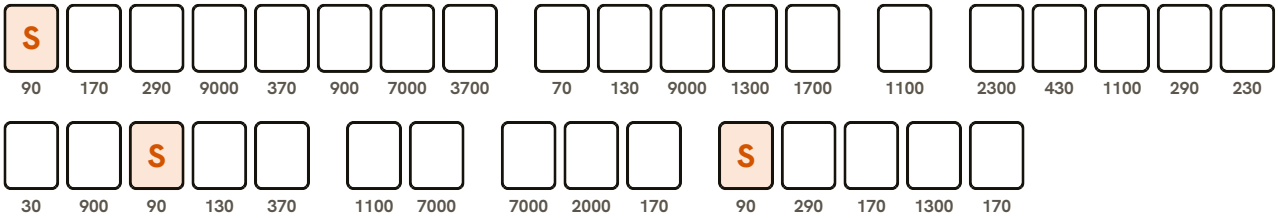
7 × 7 = ☐ → T	5 × 9 = ☐ → A	10 × 10 = ☐ → S
10 × 7 = ☐ → B	10 × 4 = ☐ → H	9 × 8 = ☐ → I
6 × 3 = ☐ → U	2 × 11 = ☐ → L	11 × 3 = ☐ → E
2 × 1 = ☐ → D	7 × 12 = ☐ → C	2 × 4 = ☐ → W
12 × 9 = ☐ → P	8 × 7 = ☐ → R	10 × 2 = ☐ → O
6 × 8 = ☐ → Y		

Scratch space:

CLUE 4 Rounding

The stadium radar gun estimated the speed of the passing play to the nearest whole mile per hour.

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



Round 86 to the nearest ten ☐ → S

Round 234 to the nearest ten ☐ → K

Round 371 to the nearest ten ☐ → R

Round 431 to the nearest ten ☐ → L

Round 28 to the nearest ten ☐ → V

Round 1,708 to the nearest hundred ☐ → D

Round 874 to the nearest hundred ☐ → I

Round 286 to the nearest ten ☐ → C

Round 8,864 to the nearest thousand ☐ → U

Round 3,700 to the nearest hundred ☐ → Y

Round 6,614 to the nearest thousand ☐ → T

Round 1,077 to the nearest hundred ☐ → A

Round 171 to the nearest ten ☐ → E

Round 2,279 to the nearest hundred ☐ → B

Round 1,333 to the nearest hundred ☐ → N

Round 68 to the nearest ten ☐ → F

Round 2,156 to the nearest thousand ☐ → H

Round 130 to the nearest ten ☐ → O

Scratch space:

CLUE 5

Division facts (1-12) - the last clue

Detective Brooks divided the total team jerseys equally among the equipment bags to locate the hidden clue.

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:

54 ÷ 9 = ☐ | 108 ÷ 12 = ☐ | 44 ÷ 11 = ☐ | 30 ÷ 3 = ☐ | 22 ÷ 2 = ☐

80 ÷ 10 = ☐ | 16 ÷ 8 = ☐ | 30 ÷ 6 = ☐ | 9 ÷ 9 = ☐ | 30 ÷ 10 = ☐

36 ÷ 3 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain launched a hail mary pass, then tightened a sweat headband.
2. The villain launched a hail mary pass, then checked a whistle lanyard.
3. The villain performed a rapid spin move, then pulled up a padded arm sleeve.
4. The villain launched a hail mary pass, then adjusted their grip gloves.
5. The villain performed a rapid spin move, then tightened a sweat headband.
6. The villain triggered a speed burst, then tightened a sweat headband.
7. The villain launched a hail mary pass, then laced up high top sneakers.
8. The villain executed a crossover dribble, then pulled up a padded arm sleeve.
9. The villain performed a rapid spin move, then adjusted their grip gloves.
10. The villain sank a deep three point shot, then laced up high top sneakers.
11. The villain triggered a speed burst, then checked a whistle lanyard.
12. The villain executed a crossover dribble, then adjusted their grip gloves.

TEACHER / PARENT

Answer Key

The Missing All-Star Trophy

Culprit: Travis Bell

Hail Mary Pass · High Top Sneakers · Right Handed · Black Visor · Loud Whistles

Trail: Start 21 → Clue 1 19 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE THIEF DOES NOT WEAR A WHISTLE LANYARD"

1/3 of 87 = 29 (T) · 1/5 of 40 = 8 (I) · 5/8 of 56 = 35 (D) · 1/4 of 156 = 39 (Y) · 1/5 of 30 = 6 (R) · 1/3 of 114 = 38 (F) · 1/5 of 150 = 30 (O) · 5/10 of 32 = 16 (W) · 3/10 of 120 = 36 (A) · 5/6 of 30 = 25 (S) · 3/6 of 20 = 10 (H) · 2/3 of 33 = 22 (E) · 1/3 of 69 = 23 (L) · 2/8 of 44 = 11 (N)

Clue 2 (Order of operations): "FOOTPRINTS SHOW THE SUSPECT IS RIGHT HANDED"

7 × 11 - 12 = 65 (F) · 1 + 2 × 5 = 11 (D) · 6 × 12 - 5 = 67 (H) · 8 + 6 × 8 = 56 (A) · 13 + 5 × 2 = 23 (O) · 6 × 11 - 9 = 57 (G) · 7 + 2 × 4 = 15 (S) · 9 + 8 × 3 = 33 (C) · 3 × 10 - 9 = 21 (P) · 16 + 8 × 8 = 80 (E) · 23 + 5 × 7 = 58 (U) · 5 × 9 - 2 = 43 (W) · 33 + 4 × 7 = 61 (I) · 3 + 2 × 3 = 9 (N) · 5 × 9 - 27 = 18 (R) · 10 × 8 - 1 = 79 (T)

Clue 3 (Multiplication facts (1-12)): "THE SUSPECT IS DISTRACTED BY LOUD WHISTLES"

7 × 7 = 49 (T) · 5 × 9 = 45 (A) · 10 × 10 = 100 (S) · 10 × 7 = 70 (B) · 10 × 4 = 40 (H) · 9 × 8 = 72 (I) · 6 × 3 = 18 (U) · 2 × 11 = 22 (L) · 11 × 3 = 33 (E) · 2 × 1 = 2 (D) · 7 × 12 = 84 (C) · 2 × 4 = 8 (W) · 12 × 9 = 108 (P) · 8 × 7 = 56 (R) · 10 × 2 = 20 (O) · 6 × 8 = 48 (Y)

Clue 4 (Rounding): "SECURITY FOUND A BLACK VISOR AT THE SCENE"

Round 86 to the nearest ten = 90 (S) · Round 234 to the nearest ten = 230 (K) · Round 371 to the nearest ten = 370 (R) · Round 431 to the nearest ten = 430 (L) · Round 28 to the nearest ten = 30 (V) · Round 1,708 to the nearest hundred = 1700 (D) · Round 874 to the nearest hundred = 900 (I) · Round 286 to the nearest ten = 290 (C) · Round 8,864 to the nearest thousand = 9000 (U) · Round 3,700 to the nearest hundred = 3700 (Y) · Round 6,614 to the nearest thousand = 7000 (T) · Round 1,077 to the nearest hundred = 1100 (A) · Round 171 to the nearest ten = 170 (E) · Round 2,279 to the nearest hundred = 2300 (B) · Round 1,333 to the nearest hundred = 1300 (N) · Round 68 to the nearest ten = 70 (F) · Round 2,156 to the nearest thousand = 2000 (H) · Round 130 to the nearest ten = 130 (O)

Clue 5 (Division facts (1-12)): surviving statement is box 7 → Travis Bell

54 ÷ 9 = 6 · 108 ÷ 12 = 9 · 44 ÷ 11 = 4 · 30 ÷ 3 = 10 · 22 ÷ 2 = 11 · 80 ÷ 10 = 8 · 16 ÷ 8 = 2 · 30 ÷ 6 = 5 · 9 ÷ 9 = 1 · 30 ÷ 10 = 3 · 36 ÷ 3 = 12