



The Great All Star Trophy Mystery

Grade 3 math · Multiplication, Skip counting, Word problems, Fractions of a number · Reading level grades 3-4

Detective: _____ Date: _____

Someone snuck into the Champion Sports Arena right before the big championship game and hid the Golden MVP Trophy! Solve the math clues to figure out which star athlete crashed the match.

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 Match Crasher 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	GEAR PIECE	DOMINANT HAND	HEADWEAR	DISTRACTION
Roger Federer	Spin Drop Shot	Golden Mascot Mask	Left Handed	Green Helmet	Loud Horns
Alex Morgan	Rocket Kick	Pivoting Cone	Left Handed	Green Helmet	Loud Horns
Tyreek Hill	Gridiron Tackle	Pivoting Cone	Right Handed	Blue Visor	Squeaky Shoes
Tom Brady	Cannon Throw	Golden Mascot Mask	Left Handed	Blue Visor	Loud Horns
Lionel Messi	Spin Drop Shot	Golden Mascot Mask	Right Handed	Green Helmet	Loud Horns
Erling Haaland	Rocket Kick	Grip Tape Roll	Right Handed	Blue Visor	Popcorn Smells
Aaron Donald	Gridiron Tackle	Grip Tape Roll	Right Handed	Green Helmet	Squeaky Shoes
Kylian Mbappe	Rocket Kick	Grip Tape Roll	Left Handed	Blue Visor	Loud Horns
Novak Djokovic	Laser Serve	Championship Ring	Left Handed	Blue Visor	Loud Horns
Justin Jefferson	Cannon Throw	Silver Whistle	Left Handed	Blue Visor	Loud Horns
Harry Kane	Spin Drop Shot	Silver Whistle	Left Handed	Blue Visor	Loud Horns
Coco Gauff	Rocket Kick	Grip Tape Roll	Right Handed	Blue Visor	Loud Horns
Josh Allen	Gridiron Tackle	Silver Whistle	Left Handed	Blue Visor	Squeaky Shoes
Travis Kelce	Spin Drop Shot	Championship Ring	Right Handed	Red Sweatband	Loud Horns
Patrick Mahomes	Gridiron Tackle	Pivoting Cone	Right Handed	Blue Visor	Loud Horns
Rafael Nadal	Gridiron Tackle	Pivoting Cone	Left Handed	Blue Visor	Popcorn Smells
Venus Williams	Rocket Kick	Pivoting Cone	Right Handed	Blue Visor	Squeaky Shoes
Megan Rapinoe	Gridiron Tackle	Golden Mascot Mask	Right Handed	Blue Visor	Loud Horns
Lamar Jackson	Cannon Throw	Golden Mascot Mask	Left Handed	Blue Visor	Squeaky Shoes
Serena Williams	Laser Serve	Golden Mascot Mask	Right Handed	Red Sweatband	Squeaky Shoes
Carlos Alcaraz	Gridiron Tackle	Grip Tape Roll	Right Handed	Green Helmet	Loud Horns

CLUE 1
Multiplication facts (1-12)

To count the exact rows of practice balls stored in the locker room, you multiply.

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

T					T											
22	100	45	60	18	22	21	100	21	3	18	11	100	45	3	77	11

		T								T					
16	32	22	1	11	77	16	10	10	3	77	48	22	18	48	45

3	32	14	14

$11 \times 2 = \square \rightarrow$ T	$7 \times 2 = \square \rightarrow$ L	$7 \times 11 = \square \rightarrow$ I
$1 \times 1 = \square \rightarrow$ U	$1 \times 11 = \square \rightarrow$ S	$4 \times 8 = \square \rightarrow$ O
$10 \times 10 = \square \rightarrow$ H	$1 \times 3 = \square \rightarrow$ R	$6 \times 10 = \square \rightarrow$ M
$9 \times 2 = \square \rightarrow$ A	$12 \times 4 = \square \rightarrow$ P	$3 \times 7 = \square \rightarrow$ C
$1 \times 10 = \square \rightarrow$ G	$5 \times 9 = \square \rightarrow$ E	$8 \times 2 = \square \rightarrow$ N

Scratch space:

CLUE 2



5

26 9 14 100 33 14 65 50 110 100 80 100 60 14 140 26 70 100

24 14 90 26 9 65 33 42 14 42

 $\rightarrow$ **T**

A diagram showing a mapping from a box with a thick border to a box with a thin border containing the letter 'K'.

A diagram showing a box with an arrow pointing to a box labeled **N**.

☐ → ☒ **F**

A diagram showing a box with a question mark pointing to a box with the letter C.

A diagram showing a transformation. On the left is a simple rectangular box. An arrow points from this box to another box on the right. The box on the right is thicker and contains the letter 'U'.

A diagram illustrating a transition. On the left is a simple rectangular box. An arrow points from this box to a second box on the right. The second box is identical in shape but has a thicker border and contains the capital letter 'H' in the center.

A diagram showing a transition from an empty box to a box containing the letter A. The first box is empty, followed by a right-pointing arrow, and then a box containing the letter A.

→ **D**

A diagram showing a box with an arrow pointing to a box labeled P.

A diagram showing a box with an arrow pointing to a box labeled 'E'.

A diagram showing a transformation. On the left is an empty rounded rectangle. An arrow points to the right, where a similar rounded rectangle contains the letter 'I'.

A diagram illustrating a transition. On the left is a rounded rectangle. An arrow points from this rectangle to another rounded rectangle on the right, which contains the letter 'L'.

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 → **S**

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

Scratch space:

CLUE 3

Word problems

The head equipment manager left a note with a math problem about missing gear.

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

Someone scared the villain off with

L **S** .

14 43 66 18 39 43 37 56

Referee lined up 2 rows of 7 pylon cones. How many pylon cones in all?

Answer: → **L**

There were 93 footballs. 27 were used up. How many footballs are left?

Answer: → **U**

There were 65 pylon cones. 22 were used up. How many pylon cones are left?

Answer: → **O**

Referee found 6 soccer balls yesterday and 33 more today. How many soccer balls in all?

Answer: → **H**

Referee found 19 footballs yesterday and 37 more today. How many footballs in all?

Answer: → **N**

Referee found 34 water bottles yesterday and 3 more today. How many water bottles in all?

Answer: → **R**

Referee lined up 2 rows of 9 tennis rackets. How many tennis rackets in all?

Answer: → **D**

Scratch space:

CLUE 4
Fractions of a number

The stadium crew cleaned a fraction of the court seating before finding a secret note.

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

A											A						
23	4	28	12	3	40	18	33	6	9	39	23	33	29	6	12	32	36

6	32	19	31	3	4	3	32	10	31

$5/10 \text{ of } 46 = \square \rightarrow \text{A}$

$6/10 \text{ of } 10 = \square \rightarrow \text{O}$

$5/10 \text{ of } 38 = \square \rightarrow \text{T}$

$2/4 \text{ of } 36 = \square \rightarrow \text{I}$

$5/10 \text{ of } 66 = \square \rightarrow \text{S}$

$4/5 \text{ of } 35 = \square \rightarrow \text{L}$

$3/8 \text{ of } 24 = \square \rightarrow \text{R}$

$1/5 \text{ of } 155 = \square \rightarrow \text{H}$

$1/3 \text{ of } 120 = \square \rightarrow \text{V}$

$2/10 \text{ of } 180 = \square \rightarrow \text{D}$

$1/2 \text{ of } 58 = \square \rightarrow \text{F}$

$1/6 \text{ of } 24 = \square \rightarrow \text{B}$

$1/5 \text{ of } 60 = \square \rightarrow \text{U}$

$2/10 \text{ of } 160 = \square \rightarrow \text{N}$

$2/10 \text{ of } 50 = \square \rightarrow \text{C}$

$5/10 \text{ of } 78 = \square \rightarrow \text{W}$

$3/6 \text{ of } 6 = \square \rightarrow \text{E}$

Scratch space:

CLUE 5**Fractions of a number - the last clue**

Only a fraction of the tennis rackets on the rack were moved by the suspect.

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:

$2/10 \text{ of } 35 = \boxed{}$

$2/4 \text{ of } 2 = \boxed{}$

$2/6 \text{ of } 6 = \boxed{}$

$3/5 \text{ of } 15 = \boxed{}$

$2/4 \text{ of } 22 = \boxed{}$

$5/8 \text{ of } 16 = \boxed{}$

$5/10 \text{ of } 6 = \boxed{}$

$1/5 \text{ of } 25 = \boxed{}$

$1/8 \text{ of } 32 = \boxed{}$

$1/8 \text{ of } 48 = \boxed{}$

$3/5 \text{ of } 20 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain served an illegal ace, then swapped out the official game balls.
2. The villain intercepted the playbook, then hid the key to the locker room.
3. The villain blitzed through the tunnel, then stole the championship trophy.
4. The villain curled a rogue spin shot, then hid the key to the locker room.
5. The villain kick started the confusion, then hid the key to the locker room.
6. The villain intercepted the playbook, then blew out the field floodlights.
7. The villain intercepted the playbook, then stole the championship trophy.
8. The villain curled a rogue spin shot, then stole the championship trophy.
9. The villain blitzed through the tunnel, then blew out the field floodlights.
10. The villain kick started the confusion, then stole the championship trophy.
11. The villain kick started the confusion, then swapped out the official game balls.
12. The villain served an illegal ace, then hid the key to the locker room.

Answer Key

The Great All Star Trophy Mystery

Culprit: Harry Kane

Spin Drop Shot · Silver Whistle · Left Handed · Blue Visor · Loud Horns

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

Clue 1 (Multiplication facts (1-12)): "THE MATCH CRASHER IS NOT USING GRIP TAPE ROLL"

$11 \times 2 = 22$ (T) · $7 \times 2 = 14$ (L) · $7 \times 11 = 77$ (I) · $1 \times 1 = 1$ (U) · $1 \times 11 = 11$ (S) · $4 \times 8 = 32$ (O) · $10 \times 10 = 100$ (H) · $1 \times 3 = 3$ (R) · $6 \times 10 = 60$ (M) · $9 \times 2 = 18$ (A) · $12 \times 4 = 48$ (P) · $3 \times 7 = 21$ (C) · $1 \times 10 = 10$ (G) · $5 \times 9 = 45$ (E) · $8 \times 2 = 16$ (N)

Clue 2 (Skip counting): "THE SNEAKY SUSPECT IS LEFT HANDED"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, __, 60, 70 = 50 (K) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (F) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (C) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (U) · Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 = 9 (H) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (D) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, __, 70, 80 = 60 (P) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 = 14 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, __, 75, 80 = 70 (I) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 = 24 (L) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (Y)

Clue 3 (Word problems): "LOUD HORNS"

Referee lined up 2 rows of 7 pylon cones. How many pylon cones in all? = 14 (L) · There were 93 footballs. 27 were used up. How many footballs are left? = 66 (U) · There were 65 pylon cones. 22 were used up. How many pylon cones are left? = 43 (O) · Referee found 6 soccer balls yesterday and 33 more today. How many soccer balls in all? = 39 (H) · Referee found 19 footballs yesterday and 37 more today. How many footballs in all? = 56 (N) · Referee found 34 water bottles yesterday and 3 more today. How many water bottles in all? = 37 (R) · Referee lined up 2 rows of 9 tennis rackets. How many tennis rackets in all? = 18 (D)

Clue 4 (Fractions of a number): "A BLUE VISOR WAS FOUND ON THE BENCH"

$5/10$ of 46 = 23 (A) · $6/10$ of 10 = 6 (O) · $5/10$ of 38 = 19 (T) · $2/4$ of 36 = 18 (I) · $5/10$ of 66 = 33 (S) · $4/5$ of 35 = 28 (L) · $3/8$ of 24 = 9 (R) · $1/5$ of 155 = 31 (H) · $1/3$ of 120 = 40 (V) · $2/10$ of 180 = 36 (D) · $1/2$ of 58 = 29 (F) · $1/6$ of 24 = 4 (B) · $1/5$ of 60 = 12 (U) · $2/10$ of 160 = 32 (N) · $2/10$ of 50 = 10 (C) · $5/10$ of 78 = 39 (W) · $3/6$ of 6 = 3 (E)

Clue 5 (Fractions of a number): surviving statement is box 8 → Harry Kane

$2/10$ of 35 = 7 · $2/4$ of 2 = 1 · $2/6$ of 6 = 2 · $3/5$ of 15 = 9 · $2/4$ of 22 = 11 · $5/8$ of 16 = 10 · $5/10$ of 6 = 3 · $1/5$ of 25 = 5 · $1/8$ of 32 = 4 · $1/8$ of 48 = 6 · $3/5$ of 20 = 12