The All-Star Trophy Heist

Grade 7 math · Addition, Multiplication, Rounding, Word problems, Division · Reading level grades 7-9

Detective: _____ **Date:** _____

Moments before the tip-off at the regional championship, the team discovered that the MVP trophy had vanished from the display cabinet. The arena detective must analyze locker room clues to identify the culprit before game time.

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 arena saboteur is _____

Possible suspects

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

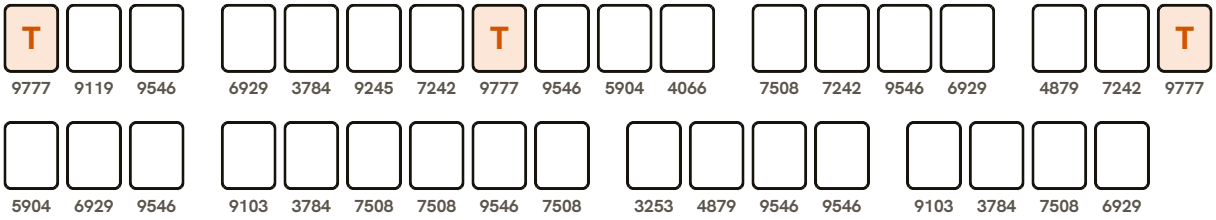
NAME	SIGNATURE MOVE	LOCKER GEAR	SHOOTING HAND	HEADBAND COLOR	DEFENSIVE FLAW
Kobe Sterling	Cross Dribble	High-Top Sneakers	Right Handed	Midnight Black Headband	Biting On Pump Fakes
Maya Lin	Fadeaway Jumper	Padded Knee Pads	Right Handed	Midnight Black Headband	Sprinting Back Late
Tara Bell	Sky Hook	Weighted Vest	Right Handed	Midnight Black Headband	Biting On Pump Fakes
Keira Walsh	No-Look Pass	Weighted Vest	Left Handed	Midnight Black Headband	Biting On Pump Fakes
Sienna West	No-Look Pass	Weighted Vest	Left Handed	Silver Mesh Headband	Biting On Pump Fakes
Julian Cruz	Eurostep Drive	Grip Resin Bag	Right Handed	Silver Mesh Headband	Biting On Pump Fakes
Elena Rostova	Eurostep Drive	Weighted Vest	Right Handed	Silver Mesh Headband	Reaching In Deep
Rhea Patel	No-Look Pass	Padded Knee Pads	Right Handed	Neon Orange Headband	Biting On Pump Fakes
Sofia Rivera	Fadeaway Jumper	Compression Sleeve	Left Handed	Midnight Black Headband	Biting On Pump Fakes
Andre Hayes	Sky Hook	Grip Resin Bag	Right Handed	Midnight Black Headband	Reaching In Deep
Jamal Brooks	Cross Dribble	Padded Knee Pads	Right Handed	Silver Mesh Headband	Sprinting Back Late
Nia Sterling	Fadeaway Jumper	Grip Resin Bag	Right Handed	Neon Orange Headband	Biting On Pump Fakes
Devon Park	Cross Dribble	Padded Knee Pads	Left Handed	Midnight Black Headband	Reaching In Deep
Bryce Miller	Eurostep Drive	High-Top Sneakers	Right Handed	Neon Orange Headband	Reaching In Deep
Tariq Reed	Fadeaway Jumper	Weighted Vest	Right Handed	Midnight Black Headband	Biting On Pump Fakes
Leo Dupont	No-Look Pass	Compression Sleeve	Left Handed	Neon Orange Headband	Reaching In Deep
Marcus Vance	Cross Dribble	Weighted Vest	Right Handed	Midnight Black Headband	Biting On Pump Fakes
Darius Cole	Eurostep Drive	Weighted Vest	Right Handed	Midnight Black Headband	Reaching In Deep
Xavier Thorne	Cross Dribble	Compression Sleeve	Left Handed	Silver Mesh Headband	Reaching In Deep
Amara Vance	Eurostep Drive	High-Top Sneakers	Left Handed	Neon Orange Headband	Sprinting Back Late
Chloe Bennett	Sky Hook	Padded Knee Pads	Right Handed	Midnight Black Headband	Biting On Pump Fakes

make your own at mathcrackers.com

CLUE 1 Addition

Coach Riley tallied up all the stolen practice cones across three storage bins to track down the intruder.

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



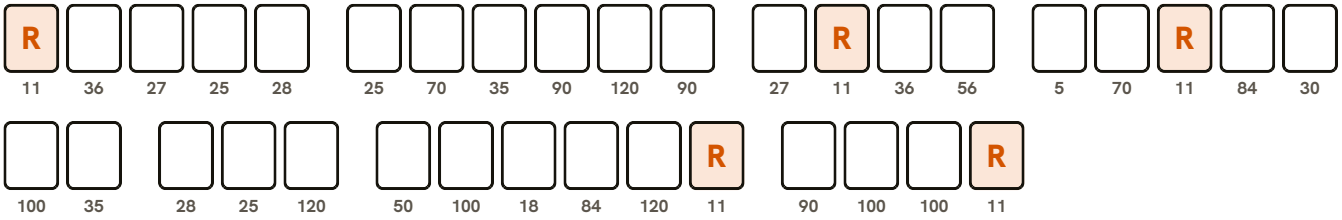
6015 + 3762 = ☐ → T	1474 + 1779 = ☐ → K	5349 + 3770 = ☐ → H
2314 + 1752 = ☐ → R	4871 + 2371 = ☐ → O	3425 + 5678 = ☐ → P
4285 + 3223 = ☐ → D	2206 + 2673 = ☐ → N	3749 + 3180 = ☐ → S
2243 + 3661 = ☐ → U	1530 + 2254 = ☐ → A	4771 + 4474 = ☐ → B
5347 + 4199 = ☐ → E		

Scratch space:

CLUE 2 Multiplication facts (1-12)

> The assistant trainer checked four racks of basketballs, counting the total number of balls on each row.

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



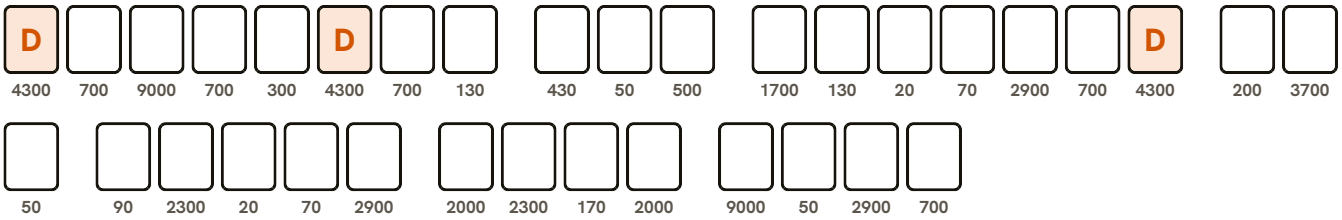
1 × 11 = ☐ → R	9 × 2 = ☐ → C	8 × 7 = ☐ → P	5 × 7 = ☐ → N
10 × 5 = ☐ → L	1 × 5 = ☐ → M	5 × 5 = ☐ → H	
7 × 10 = ☐ → A	10 × 9 = ☐ → D	5 × 6 = ☐ → S	
3 × 9 = ☐ → G	10 × 10 = ☐ → O	3 × 12 = ☐ → I	
12 × 7 = ☐ → K	12 × 10 = ☐ → E	4 × 7 = ☐ → T	

Scratch space:

CLUE 3 Rounding

> The arena scoreboard digital display malfunctioned, rounding the exact crowd ticket count to the nearest hundred.

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



Round 4,328 to the nearest hundred ☐ → **D**

Round 74 to the nearest ten ☐ → **C**

Round 206 to the nearest hundred ☐ → **B**

Round 2,176 to the nearest thousand ☐ → **P**

Round 661 to the nearest hundred ☐ → **E**

Round 8,575 to the nearest thousand ☐ → **F**

Round 54 to the nearest ten ☐ → **A**

Round 1,668 to the nearest hundred ☐ → **T**

Round 2,892 to the nearest hundred ☐ → **K**

Round 431 to the nearest ten ☐ → **W**

Round 19 to the nearest ten ☐ → **I**

Round 167 to the nearest ten ☐ → **M**

Round 93 to the nearest ten ☐ → **Q**

Round 328 to the nearest hundred ☐ → **N**

Round 2,335 to the nearest hundred ☐ → **U**

Round 3,726 to the nearest hundred ☐ → **Y**

Round 525 to the nearest hundred ☐ → **S**

Round 132 to the nearest ten ☐ → **R**

Scratch space:

CLUE 4 Word problems

The equipment crew reviewed the inventory sheets to see how many spare jerseys were missing.

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

A strand of

M							
44	87	19	81	87	103	14	73

B	L	A	C	K

	E	A		B	A		
14			19			81	19

hair turned up at the scene.

There were 76 basketballs. 32 were used up. How many basketballs are left?

Answer: ☐ → M

Coach Taylor found 95 whistles yesterday and 8 more today. How many whistles in all?

Answer: ☐ → G

There were 22 sweatbands. 3 were used up. How many sweatbands are left?

Answer: ☐ → D

There were 83 sweatbands. 2 were used up. How many sweatbands are left?

Answer: ☐ → N

Coach Taylor found 23 tactic boards yesterday and 64 more today. How many tactic boards in all?

Answer: ☐ → I

Coach Taylor lined up 7 rows of 2 whistles. How many whistles in all?

Answer: ☐ → H

Coach Taylor found 17 whistles yesterday and 56 more today. How many whistles in all?

Answer: ☐ → T

Scratch space:

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

> The referee evenly split the remaining warm-up towels among the six sideline carts to spot the misplaced stack.

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:

32 ÷ 8 = ☐	99 ÷ 11 = ☐	110 ÷ 10 = ☐	56 ÷ 8 = ☐	40 ÷ 5 = ☐
11 ÷ 11 = ☐	12 ÷ 4 = ☐	48 ÷ 4 = ☐	60 ÷ 6 = ☐	60 ÷ 12 = ☐
12 ÷ 2 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain swapped the match basketballs, then strapped on padded knee pads.
2. The villain unlocked the equipment room, then stashed a weighted vest under the bench.
3. The villain tampered with the shot clock, then pulled on a compression sleeve.
4. The villain snagged the championship trophy, then stashed a weighted vest under the bench.
5. The villain snagged the championship trophy, then dusted their hands with a grip resin bag.
6. The villain swapped the match basketballs, then stashed a weighted vest under the bench.
7. The villain unlocked the equipment room, then dusted their hands with a grip resin bag.
8. The villain tampered with the shot clock, then dusted their hands with a grip resin bag.
9. The villain tampered with the shot clock, then laced up high top sneakers in secret.
10. The villain jammed the arena security gate, then pulled on a compression sleeve.
11. The villain tampered with the shot clock, then stashed a weighted vest under the bench.
12. The villain unlocked the equipment room, then laced up high top sneakers in secret.

TEACHER / PARENT

Answer Key

The All-Star Trophy Heist

Culprit: Tara Bell

Sky Hook · Weighted Vest · Right Handed · Midnight Black Headband · Biting On Pump Fakes

Trail: Start 21 → Clue 1 16 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SABOTEUR DOES NOT USE PADDED KNEE PADS"

6015 + 3762 = 9777 (T) · 1474 + 1779 = 3253 (K) · 5349 + 3770 = 9119 (H) · 2314 + 1752 = 4066 (R) · 4871 + 2371 = 7242 (O) · 3425 + 5678 = 9103 (P) · 4285 + 3223 = 7508 (D) · 2206 + 2673 = 4879 (N) · 3749 + 3180 = 6929 (S) · 2243 + 3661 = 5904 (U) · 1530 + 2254 = 3784 (A) · 4771 + 4474 = 9245 (B) · 5347 + 4199 = 9546 (E)

Clue 2 (Multiplication facts (1-12)): "RIGHT HANDED GRIP MARKS ON THE LOCKER DOOR"

1 × 11 = 11 (R) · 9 × 2 = 18 (C) · 8 × 7 = 56 (P) · 5 × 7 = 35 (N) · 10 × 5 = 50 (L) · 1 × 5 = 5 (M) · 5 × 5 = 25 (H) · 7 × 10 = 70 (A) · 10 × 9 = 90 (D) · 5 × 6 = 30 (S) · 3 × 9 = 27 (G) · 10 × 10 = 100 (O) · 3 × 12 = 36 (I) · 12 × 7 = 84 (K) · 12 × 10 = 120 (E) · 4 × 7 = 28 (T)

Clue 3 (Rounding): "DEFENDER WAS TRICKED BY A QUICK PUMP FAKE"

Round 4,328 to the nearest hundred = 4300 (D) · Round 74 to the nearest ten = 70 (C) · Round 206 to the nearest hundred = 200 (B) · Round 2,176 to the nearest thousand = 2000 (P) · Round 661 to the nearest hundred = 700 (E) · Round 8,575 to the nearest thousand = 9000 (F) · Round 54 to the nearest ten = 50 (A) · Round 1,668 to the nearest hundred = 1700 (T) · Round 2,892 to the nearest hundred = 2900 (K) · Round 431 to the nearest ten = 430 (W) · Round 19 to the nearest ten = 20 (I) · Round 167 to the nearest ten = 170 (M) · Round 93 to the nearest ten = 90 (Q) · Round 328 to the nearest hundred = 300 (N) · Round 2,335 to the nearest hundred = 2300 (U) · Round 3,726 to the nearest hundred = 3700 (Y) · Round 525 to the nearest hundred = 500 (S) · Round 132 to the nearest ten = 130 (R)

Clue 4 (Word problems): "MIDNIGHT BLACK HEADBAND"

There were 76 basketballs. 32 were used up. How many basketballs are left? = 44 (M) · Coach Taylor found 95 whistles yesterday and 8 more today. How many whistles in all? = 103 (G) · There were 22 sweatbands. 3 were used up. How many sweatbands are left? = 19 (D) · There were 83 sweatbands. 2 were used up. How many sweatbands are left? = 81 (N) · Coach Taylor found 23 tactic boards yesterday and 64 more today. How many tactic boards in all? = 87 (I) · Coach Taylor lined up 7 rows of 2 whistles. How many whistles in all? = 14 (H) · Coach Taylor found 17 whistles yesterday and 56 more today. How many whistles in all? = 73 (T)

Clue 5 (Division facts (1-12)): surviving statement is box 2 → Tara Bell

32 ÷ 8 = 4 · 99 ÷ 11 = 9 · 110 ÷ 10 = 11 · 56 ÷ 8 = 7 · 40 ÷ 5 = 8 · 11 ÷ 11 = 1 · 12 ÷ 4 = 3 · 48 ÷ 4 = 12 · 60 ÷ 6 = 10 · 60 ÷ 12 = 5 · 12 ÷ 2 = 6