The Big Hoop Heist

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

Detective: _____ **Date:** _____

The championship trophy is gone! Right before the big game at Hoop-A-Rama Arena, someone snatched the Golden Basketball Trophy. Coach Miller needs your help. Solve the basketball math puzzles to find out which star player is actually the secret Trophy Snatcher!

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 Snatcher 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	SUPER GEAR	SHOOTING HAND	HEADBAND COLOR	COURT WEAKNESS
Rebound Rita	Lightning Spin Move	Squeaky High-Tops	Left-Handed Shooter	Green Headband	Double Team Defense
Yao	Half-Court Shot	Custom Face Mask	Left-Handed Shooter	Red Headband	Double Team Defense
Dribble Dan	Ankle-Breaker Cross	Custom Face Mask	Left-Handed Shooter	Red Headband	Double Team Defense
Muggsy	Blind No-Look Pass	Squeaky High-Tops	Left-Handed Shooter	Red Headband	Double Team Defense
Kyrie	Lightning Spin Move	Custom Face Mask	Right-Handed Shooter	Green Headband	Double Team Defense
Hoop Kid	Ankle-Breaker Cross	Glow-in-the-Dark Socks	Right-Handed Shooter	Blue Headband	Slippery Floors
Giannis	Blind No-Look Pass	Glow-in-the-Dark Socks	Left-Handed Shooter	Red Headband	Double Team Defense
Shaq	Lightning Spin Move	Gold Trim Jersey	Left-Handed Shooter	Red Headband	Slippery Floors
Backboard Ben	Lightning Spin Move	Neon Wristband	Right-Handed Shooter	Green Headband	Double Team Defense
Wemby	Blind No-Look Pass	Custom Face Mask	Left-Handed Shooter	Green Headband	Loud Buzzer Sound
Kawhi	Ankle-Breaker Cross	Custom Face Mask	Right-Handed Shooter	Red Headband	Double Team Defense
Kobe	Blind No-Look Pass	Custom Face Mask	Right-Handed Shooter	Blue Headband	Slippery Floors
Jordan	Monster Dunk	Glow-in-the-Dark Socks	Right-Handed Shooter	Green Headband	Double Team Defense
Fast Break Fred	Blind No-Look Pass	Custom Face Mask	Left-Handed Shooter	Red Headband	Double Team Defense
Netty Nick	Half-Court Shot	Gold Trim Jersey	Right-Handed Shooter	Green Headband	Slippery Floors
Spud	Lightning Spin Move	Custom Face Mask	Right-Handed Shooter	Blue Headband	Loud Buzzer Sound
Swish Sally	Lightning Spin Move	Custom Face Mask	Right-Handed Shooter	Red Headband	Loud Buzzer Sound
Dunk Master	Ankle-Breaker Cross	Custom Face Mask	Right-Handed Shooter	Red Headband	Loud Buzzer Sound
Pivot Pam	Blind No-Look Pass	Squeaky High-Tops	Right-Handed Shooter	Red Headband	Loud Buzzer Sound
LeBron	Ankle-Breaker Cross	Neon Wristband	Right-Handed Shooter	Red Headband	Double Team Defense
Luka	Blind No-Look Pass	Glow-in-the-Dark Socks	Right-Handed Shooter	Green Headband	Double Team Defense

CLUE 1 Addition

> The team tallied up all the basketballs in the equipment room. Add the two groups of basketballs together to find the security camera code.

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

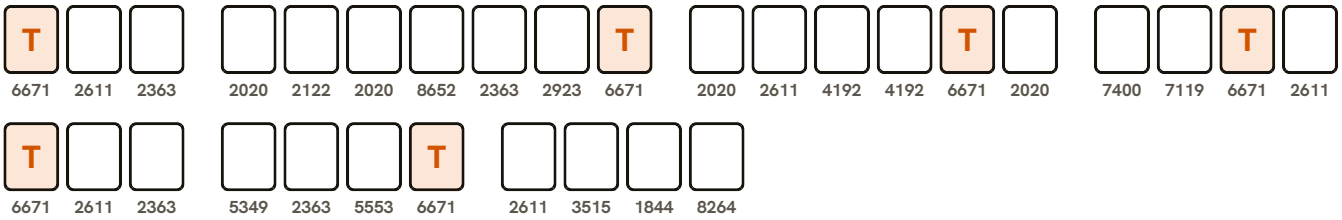
4605 + 3815 = ☐ → T	5953 + 2875 = ☐ → W	3054 + 1436 = ☐ → D
4906 + 3823 = ☐ → R	1626 + 3536 = ☐ → L	3124 + 3281 = ☐ → O
2114 + 2155 = ☐ → N	2042 + 2461 = ☐ → K	3910 + 4716 = ☐ → E
850 + 1935 = ☐ → S	2240 + 1944 = ☐ → A	4119 + 3895 = ☐ → G
2365 + 2531 = ☐ → C	2812 + 2347 = ☐ → H	

Scratch space:

CLUE 2 Subtraction

> Coach needs to find the difference between the red team's score and the blue team's score. Subtract the smaller score from the larger score to unlock the gym keybox.

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



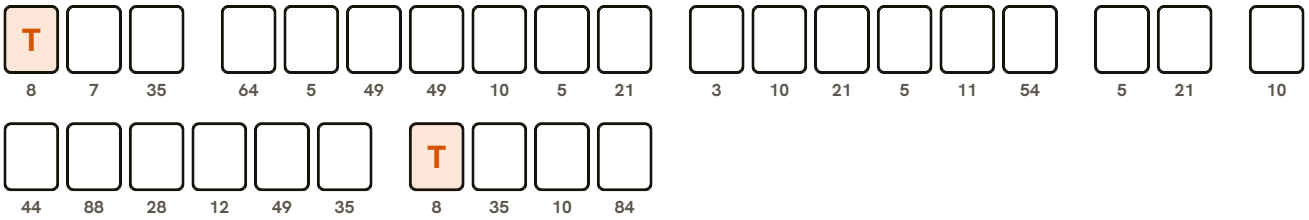
8847 - 2176 = ☐ → T	9976 - 2576 = ☐ → W	7765 - 646 = ☐ → I
10144 - 1880 = ☐ → D	6481 - 4118 = ☐ → E	8779 - 127 = ☐ → P
6043 - 3120 = ☐ → C	5849 - 4005 = ☐ → N	7846 - 2293 = ☐ → F
5202 - 3080 = ☐ → U	7682 - 2333 = ☐ → L	4849 - 2829 = ☐ → S
6273 - 2081 = ☐ → O	6292 - 2777 = ☐ → A	7413 - 4802 = ☐ → H

Scratch space:

CLUE 3 Multiplication facts (1-12)

> The players stand in perfect rows during practice drills. Multiply the number of rows by the players in each row to count the total wristbands.

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



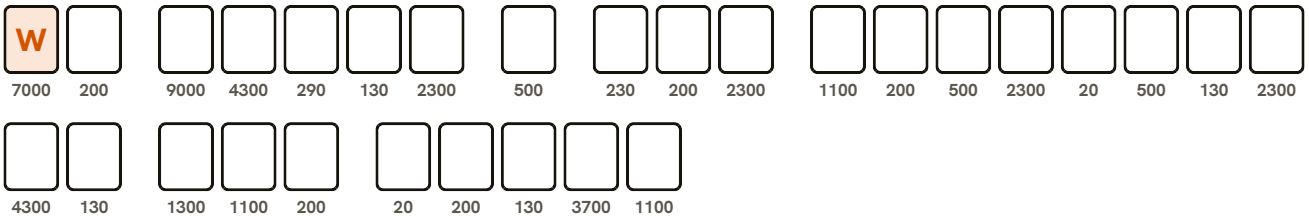
8 × 1 = ☐ → T	3 × 7 = ☐ → N	7 × 1 = ☐ → H	5 × 7 = ☐ → E
10 × 1 = ☐ → A	11 × 4 = ☐ → D	9 × 6 = ☐ → S	
7 × 12 = ☐ → M	11 × 1 = ☐ → C	1 × 3 = ☐ → P	
4 × 7 = ☐ → U	1 × 5 = ☐ → I	7 × 7 = ☐ → L	4 × 3 = ☐ → B
8 × 8 = ☐ → V	11 × 8 = ☐ → O		

Scratch space:

CLUE 4 Rounding

> The speed radar gun clocked a fast break layup, but it only displays rounded numbers. Round the speed to the nearest ten to get the locker combination.

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



Round 6,715 to the nearest thousand ☐ → W

Round 1,103 to the nearest hundred ☐ → H

Round 3,653 to the nearest hundred ☐ → C

Round 19 to the nearest ten ☐ → B

Round 548 to the nearest hundred ☐ → A

Round 234 to the nearest ten ☐ → R

Round 288 to the nearest ten ☐ → U

Round 128 to the nearest ten ☐ → N

Round 4,285 to the nearest hundred ☐ → O

Round 2,271 to the nearest hundred ☐ → D

Round 1,318 to the nearest hundred ☐ → T

Round 9,105 to the nearest thousand ☐ → F

Round 187 to the nearest hundred ☐ → E

Scratch space:

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

> We have a big box of energy bars to share equally among the team players. Divide the bars by the number of players to see what the mascot dropped.

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:

4 ÷ 4 = ☐	60 ÷ 6 = ☐	66 ÷ 11 = ☐	5 ÷ 1 = ☐	77 ÷ 7 = ☐
32 ÷ 4 = ☐	30 ÷ 10 = ☐	14 ÷ 7 = ☐	60 ÷ 5 = ☐	84 ÷ 12 = ☐
27 ÷ 3 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain grabs the championship ring box, then runs down the court.
2. The villain swipes the golden ball, then zooms past the cheering fans.
3. The villain hides the trophy in a locker, then dashes into the team bus.
4. The villain sneaks past the court security, then zooms past the cheering fans.
5. The villain hides the trophy in a locker, then jumps over the snack bar.
6. The villain grabs the championship ring box, then zooms past the cheering fans.
7. The villain sneaks past the court security, then runs down the court.
8. The villain grabs the championship ring box, then dashes into the team bus.
9. The villain swipes the golden ball, then dashes into the team bus.
10. The villain hides the trophy in a locker, then zooms past the cheering fans.
11. The villain hides the trophy in a locker, then runs down the court.
12. The villain sneaks past the court security, then dashes into the team bus.

TEACHER / PARENT

Answer Key

The Big Hoop Heist

Culprit: Dribble Dan

Ankle-Breaker Cross · Custom Face Mask · Left-Handed Shooter · Red Headband · Double Team Defense

Trail: Start 21 → Clue 1 17 → Clue 2 7 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNATCHER DOES NOT WEAR GLOW SOCKS"

4605 + 3815 = 8420 (T) · 5953 + 2875 = 8828 (W) · 3054 + 1436 = 4490 (D) · 4906 + 3823 = 8729 (R) · 1626 + 3536 = 5162 (L) · 3124 + 3281 = 6405 (O) · 2114 + 2155 = 4269 (N) · 2042 + 2461 = 4503 (K) · 3910 + 4716 = 8626 (E) · 850 + 1935 = 2785 (S) · 2240 + 1944 = 4184 (A) · 4119 + 3895 = 8014 (G) · 2365 + 2531 = 4896 (C) · 2812 + 2347 = 5159 (H)

Clue 2 (Subtraction): "THE SUSPECT SHOOTS WITH THE LEFT HAND"

8847 - 2176 = 6671 (T) · 9976 - 2576 = 7400 (W) · 7765 - 646 = 7119 (I) · 10144 - 1880 = 8264 (D) · 6481 - 4118 = 2363 (E) · 8779 - 127 = 8652 (P) · 6043 - 3120 = 2923 (C) · 5849 - 4005 = 1844 (N) · 7846 - 2293 = 5553 (F) · 5202 - 3080 = 2122 (U) · 7682 - 2333 = 5349 (L) · 4849 - 2829 = 2020 (S) · 6273 - 2081 = 4192 (O) · 6292 - 2777 = 3515 (A) · 7413 - 4802 = 2611 (H)

Clue 3 (Multiplication facts (1-12)): "THE VILLAIN PANICS IN A DOUBLE TEAM"

8 × 1 = 8 (T) · 3 × 7 = 21 (N) · 7 × 1 = 7 (H) · 5 × 7 = 35 (E) · 10 × 1 = 10 (A) · 11 × 4 = 44 (D) · 9 × 6 = 54 (S) · 7 × 12 = 84 (M) · 11 × 1 = 11 (C) · 1 × 3 = 3 (P) · 4 × 7 = 28 (U) · 1 × 5 = 5 (I) · 7 × 7 = 49 (L) · 4 × 3 = 12 (B) · 8 × 8 = 64 (V) · 11 × 8 = 88 (O)

Clue 4 (Rounding): "WE FOUND A RED HEADBAND ON THE BENCH"

Round 6,715 to the nearest thousand = 7000 (W) · Round 1,103 to the nearest hundred = 1100 (H) · Round 3,653 to the nearest hundred = 3700 (C) · Round 19 to the nearest ten = 20 (B) · Round 548 to the nearest hundred = 500 (A) · Round 234 to the nearest ten = 230 (R) · Round 288 to the nearest ten = 290 (U) · Round 128 to the nearest ten = 130 (N) · Round 4,285 to the nearest hundred = 4300 (O) · Round 2,271 to the nearest hundred = 2300 (D) · Round 1,318 to the nearest hundred = 1300 (T) · Round 9,105 to the nearest thousand = 9000 (F) · Round 187 to the nearest hundred = 200 (E)

Clue 5 (Division facts (1-12)): surviving statement is box 4 → Dribble Dan

4 ÷ 4 = 1 · 60 ÷ 6 = 10 · 66 ÷ 11 = 6 · 5 ÷ 1 = 5 · 77 ÷ 7 = 11 · 32 ÷ 4 = 8 · 30 ÷ 10 = 3 · 14 ÷ 7 = 2 · 60 ÷ 5 = 12 · 84 ÷ 12 = 7 · 27 ÷ 3 = 9