The Case of the Missing Championship Trophy

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

Detective: _____ **Date:** _____

Just hours before the big championship game, the shiny gold trophy went missing from the locker room! Coach Marcus found sneaker prints near center court. Decode the clues to find out who sneaked into the arena!

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 hoop bandit is _____

Possible suspects

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

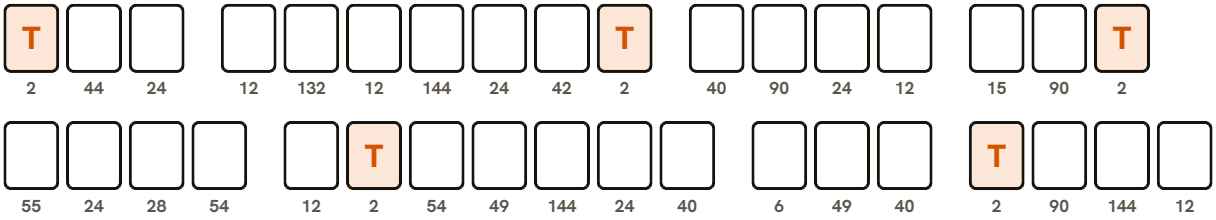
NAME	SIGNATURE SHOT	SNEAKER STYLE	SHOOTING HAND	HEADWEAR	FAVORITE SNACK
Kyrie Irving	Eurostep Drive	Striped Mid Tops	Left Handed	Red Headband	Salty Pretzels
Devin Booker	Sky Hook	Golden Low Tops	Left Handed	Black Sweatband	Orange Slices
Anthony Edwards	Sky Hook	Golden Low Tops	Left Handed	Blue Cap	Cheesy Popcorn
LeBron James	Sky Hook	Neon High Tops	Right Handed	Red Headband	Cheesy Popcorn
Giannis Antetokounmpo	Fadeaway Jump	Retro Leather Shoes	Left Handed	Black Sweatband	Orange Slices
Jimmy Butler	Eurostep Drive	Retro Leather Shoes	Right Handed	Red Headband	Salty Pretzels
Sabrina Ionescu	Fadeaway Jump	Striped Mid Tops	Right Handed	Black Sweatband	Orange Slices
Klay Thompson	Fadeaway Jump	Neon High Tops	Right Handed	Black Sweatband	Orange Slices
Caitlin Clark	Sky Hook	Striped Mid Tops	Left Handed	Red Headband	Orange Slices
Shaquille ONeal	Three Pointer	Glitter Sneakers	Right Handed	Black Sweatband	Orange Slices
Aja Wilson	Three Pointer	Retro Leather Shoes	Right Handed	Black Sweatband	Cheesy Popcorn
Luka Doncic	Three Pointer	Golden Low Tops	Right Handed	Blue Cap	Orange Slices
Nikola Jokic	Fadeaway Jump	Retro Leather Shoes	Right Handed	Black Sweatband	Orange Slices
Trae Young	Sky Hook	Striped Mid Tops	Left Handed	Blue Cap	Orange Slices
Steph Curry	Eurostep Drive	Glitter Sneakers	Right Handed	Red Headband	Salty Pretzels
Maya Moore	Fadeaway Jump	Retro Leather Shoes	Left Handed	Blue Cap	Salty Pretzels
Ja Morant	Three Pointer	Neon High Tops	Right Handed	Red Headband	Orange Slices
Sue Bird	Sky Hook	Striped Mid Tops	Left Handed	Blue Cap	Cheesy Popcorn
Donovan Mitchell	Slam Dunk	Golden Low Tops	Right Handed	Black Sweatband	Orange Slices
Kobe Bryant	Fadeaway Jump	Neon High Tops	Right Handed	Blue Cap	Cheesy Popcorn
Damian Lillard	Sky Hook	Golden Low Tops	Left Handed	Blue Cap	Orange Slices

make your own at mathcrackers.com

CLUE 1 Multiplication facts (1-12)

> The arena equipment manager counted the practice basketballs stacked in equal rows on the ball racks.

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



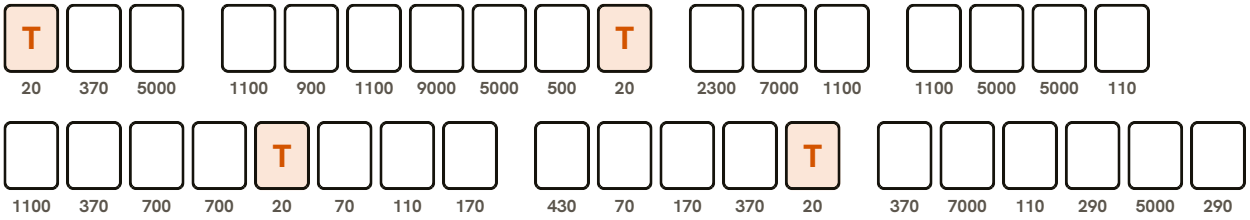
1 × 2 = ☐ → T	6 × 9 = ☐ → R	10 × 4 = ☐ → D	
5 × 11 = ☐ → W	10 × 9 = ☐ → O	12 × 12 = ☐ → P	
3 × 5 = ☐ → N	4 × 11 = ☐ → H	4 × 3 = ☐ → S	7 × 6 = ☐ → C
7 × 7 = ☐ → I	12 × 11 = ☐ → U	7 × 4 = ☐ → A	
6 × 4 = ☐ → E	6 × 1 = ☐ → M		

Scratch space:

CLUE 2 Rounding

The scoreboard digital display only showed the arena attendance rounded to the nearest hundred.

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



Round 20 to the nearest ten ☐ → T

Round 68 to the nearest ten ☐ → I

Round 367 to the nearest ten ☐ → H

Round 656 to the nearest hundred ☐ → O

Round 6,625 to the nearest thousand ☐ → A

Round 109 to the nearest ten ☐ → N

Round 5,336 to the nearest thousand ☐ → E

Round 853 to the nearest hundred ☐ → U

Round 2,254 to the nearest hundred ☐ → W

Round 170 to the nearest ten ☐ → G

Round 430 to the nearest ten ☐ → R

Round 487 to the nearest hundred ☐ → C

Round 1,115 to the nearest hundred ☐ → S

Round 294 to the nearest ten ☐ → D

Round 8,965 to the nearest thousand ☐ → P

Scratch space:

CLUE 3 Addition

The head referee tallied up all the points scored during both practice quarters combined.

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



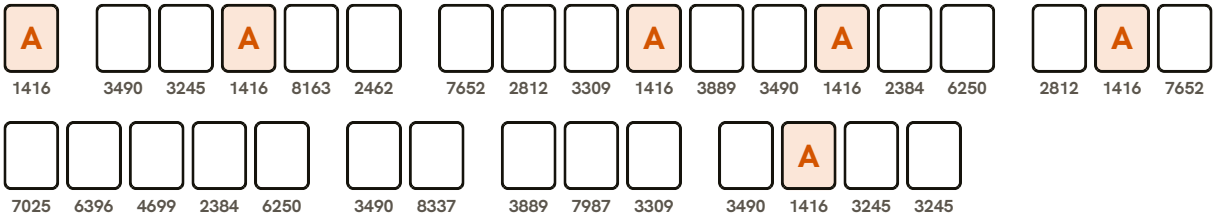
2307 + 3594 = ☐ → P	1113 + 964 = ☐ → H	3329 + 3689 = ☐ → W
2924 + 6822 = ☐ → L	3667 + 1703 = ☐ → A	5450 + 4192 = ☐ → R
2460 + 4318 = ☐ → I	2974 + 2587 = ☐ → S	2662 + 2284 = ☐ → N
3132 + 6572 = ☐ → O	6364 + 3302 = ☐ → G	2710 + 1490 = ☐ → F
5277 + 4290 = ☐ → M	2839 + 6514 = ☐ → E	3519 + 1935 = ☐ → B
3180 + 6035 = ☐ → T	2154 + 3153 = ☐ → C	1032 + 1095 = ☐ → D

Scratch space:

CLUE 4 Subtraction

The stat keeper calculated how many bench points remained after subtracting technical fouls.

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



4728 - 3312 = ☐ → A

7540 - 4231 = ☐ → E

9661 - 1324 = ☐ → Y

9851 - 3455 = ☐ → O

2916 - 532 = ☐ → N

6853 - 2964 = ☐ → T

6370 - 3125 = ☐ → L

8593 - 941 = ☐ → S

8526 - 1501 = ☐ → F

11136 - 2973 = ☐ → C

11343 - 3356 = ☐ → H

5293 - 2831 = ☐ → K

8224 - 3525 = ☐ → U

3098 - 286 = ☐ → W

8432 - 2182 = ☐ → D

7474 - 3984 = ☐ → B

Scratch space:

CLUE 5 Missing addends - the last clue

> Coach Marcus looked at the team total to figure out how many more points were needed.

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:

23 + ___ = 29 ☐	40 + ___ = 41 ☐	19 + ___ = 31 ☐	14 + ___ = 25 ☐
29 + ___ = 38 ☐	1 + ___ = 9 ☐	36 + ___ = 41 ☐	33 + ___ = 43 ☐
36 + ___ = 43 ☐	30 + ___ = 34 ☐	16 + ___ = 19 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain drained a fadeaway jump, then laced up neon high tops.
2. The villain stuffed a slam dunk, then laced up golden low tops.
3. The villain hit a three pointer, then laced up striped mid tops.
4. The villain hit a three pointer, then laced up neon high tops.
5. The villain hit a three pointer, then laced up golden low tops.
6. The villain hit a three pointer, then laced up glitter sneakers.
7. The villain stuffed a slam dunk, then laced up retro leather shoes.
8. The villain sank a sky hook, then laced up golden low tops.
9. The villain drove with a eurostep drive, then laced up retro leather shoes.
10. The villain sank a sky hook, then laced up striped mid tops.
11. The villain drove with a eurostep drive, then laced up striped mid tops.
12. The villain drained a fadeaway jump, then laced up retro leather shoes.

TEACHER / PARENT

Answer Key

The Case of the Missing Championship Trophy

Culprit: Donovan Mitchell

Slam Dunk · Golden Low Tops · Right Handed · Black Sweatband · Orange Slices

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE SUSPECT DOES NOT WEAR STRIPED MID TOPS"

1 × 2 = 2 (T) · 6 × 9 = 54 (R) · 10 × 4 = 40 (D) · 5 × 11 = 55 (W) · 10 × 9 = 90 (O) · 12 × 12 = 144 (P) · 3 × 5 = 15 (N) · 4 × 11 = 44 (H) · 4 × 3 = 12 (S) · 7 × 6 = 42 (C) · 7 × 7 = 49 (I) · 12 × 11 = 132 (U) · 7 × 4 = 28 (A) · 6 × 4 = 24 (E) · 6 × 1 = 6 (M)

Clue 2 (Rounding): "THE SUSPECT WAS SEEN SHOOTING RIGHT HANDED"

Round 20 to the nearest ten = 20 (T) · Round 68 to the nearest ten = 70 (I) · Round 367 to the nearest ten = 370 (H) · Round 656 to the nearest hundred = 700 (O) · Round 6,625 to the nearest thousand = 7000 (A) · Round 109 to the nearest ten = 110 (N) · Round 5,336 to the nearest thousand = 5000 (E) · Round 853 to the nearest hundred = 900 (U) · Round 2,254 to the nearest hundred = 2300 (W) · Round 170 to the nearest ten = 170 (G) · Round 430 to the nearest ten = 430 (R) · Round 487 to the nearest hundred = 500 (C) · Round 1,115 to the nearest hundred = 1100 (S) · Round 294 to the nearest ten = 290 (D) · Round 8,965 to the nearest thousand = 9000 (P)

Clue 3 (Addition): "PEELS FROM ORANGE SLICES WERE LEFT BEHIND"

2307 + 3594 = 5901 (P) · 1113 + 964 = 2077 (H) · 3329 + 3689 = 7018 (W) · 2924 + 6822 = 9746 (L) · 3667 + 1703 = 5370 (A) · 5450 + 4192 = 9642 (R) · 2460 + 4318 = 6778 (I) · 2974 + 2587 = 5561 (S) · 2662 + 2284 = 4946 (N) · 3132 + 6572 = 9704 (O) · 6364 + 3302 = 9666 (G) · 2710 + 1490 = 4200 (F) · 5277 + 4290 = 9567 (M) · 2839 + 6514 = 9353 (E) · 3519 + 1935 = 5454 (B) · 3180 + 6035 = 9215 (T) · 2154 + 3153 = 5307 (C) · 1032 + 1095 = 2127 (D)

Clue 4 (Subtraction): "A BLACK SWEATBAND WAS FOUND BY THE BALL"

4728 - 3312 = 1416 (A) · 7540 - 4231 = 3309 (E) · 9661 - 1324 = 8337 (Y) · 9851 - 3455 = 6396 (O) · 2916 - 532 = 2384 (N) · 6853 - 2964 = 3889 (T) · 6370 - 3125 = 3245 (L) · 8593 - 941 = 7652 (S) · 8526 - 1501 = 7025 (F) · 11136 - 2973 = 8163 (C) · 11343 - 3356 = 7987 (H) · 5293 - 2831 = 2462 (K) · 8224 - 3525 = 4699 (U) · 3098 - 286 = 2812 (W) · 8432 - 2182 = 6250 (D) · 7474 - 3984 = 3490 (B)

Clue 5 (Missing addends): surviving statement is box 2 → Donovan Mitchell

23 + ___ = 29 = 6 · 40 + ___ = 41 = 1 · 19 + ___ = 31 = 12 · 14 + ___ = 25 = 11 · 29 + ___ = 38 = 9 · 1 + ___ = 9 = 8 · 36 + ___ = 41 = 5 · 33 + ___ = 43 = 10 · 36 + ___ = 43 = 7 · 30 + ___ = 34 = 4 · 16 + ___ = 19 = 3