



The Case of the Missing Diamond Basketball

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

Detective: _____ Date: _____

The Diamond Basketball is missing! It was the grand prize for the annual Pixel-Portal Tournament. Coach Coral says someone sneaked past the redstone lasers, swam through the mermaid channel, and escaped on a pixelated dinosaur. We have twenty-four sporty suspects from across the ocean, mines, and forests. We need your math skills to crack the case and find the trophy!

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 crafty thief is _____

Possible suspects

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

NAME	PRIMARY ABILITY	SPECIAL MOVE	GOGGLE STATUS	MANE COLOR	WEAKNESS
Tricera-Tips	fire breathing	pearl tossing	wearing goggles	pixel green	shiny gold
Barnaby Bubble	fire breathing	rainbow dashing	no goggles	neon blue	sponge block
Blocky Jordan	block building	pearl tossing	wearing goggles	pixel green	bouncy ball
Hornsby Malone	super jumping	ender teleporting	no goggles	pixel green	bouncy ball
Kyrie Kelp	block building	ender teleporting	wearing goggles	bright pink	bouncy ball
Golem Giannis	horn blasting	pearl tossing	no goggles	neon blue	shiny gold
Shaq-o-saurus	fire breathing	dino roaring	no goggles	bright pink	sponge block
Magic Mermaid	block building	dino roaring	wearing goggles	pixel green	sponge block
Barnum Bow	block building	dunking	wearing goggles	neon blue	sponge block
Marina Bird	block building	rainbow dashing	no goggles	neon blue	bouncy ball
Dino Doncic	fire breathing	rainbow dashing	wearing goggles	neon blue	sponge block
Steph Unicorn	horn blasting	pearl tossing	no goggles	pixel green	shiny gold
Ender Ewing	super jumping	dino roaring	wearing goggles	bright pink	bouncy ball
Raptor Ray	block building	dino roaring	wearing goggles	pixel green	shiny gold
Diamond Dirk	super jumping	rainbow dashing	no goggles	pixel green	shiny gold
Steve Spikes	block building	ender teleporting	wearing goggles	bright pink	sponge block
Coral Durant	block building	dunking	no goggles	pixel green	shiny gold
Sparky Swift	tail swimming	dino roaring	no goggles	pixel green	shiny gold
Yoshi Yao	block building	dunking	wearing goggles	neon blue	bouncy ball
LeBron Rex	horn blasting	dino roaring	no goggles	pixel green	shiny gold
Neptuna Nash	block building	dunking	no goggles	pixel green	sponge block

CLUE 1 Rounding

The stadium radar scans the getaway tracks, but it only shows the distance rounded to the nearest ten. We need to round these block counts to read the radar.

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

T			T											T				
5000	4000	500	5000	4000	200	500	900	300	9000	500	20	70	9000	5000	4000	600	700	500

T														
5000	4000	500	300	40	70	8000	200	70	90	2000	9000	30	500	50

Round 5,133 to the nearest thousand → **T**

Round 49 to the nearest ten → **R**

Round 1,994 to the nearest thousand → **P**

Round 248 to the nearest hundred → **I**

Round 620 to the nearest hundred → **A**

Round 69 to the nearest ten → **N**

Round 29 to the nearest ten → **W**

Round 698 to the nearest hundred → **V**

Round 43 to the nearest ten → **U**

Round 16 to the nearest ten → **S**

Round 8,712 to the nearest thousand → **O**

Round 7,783 to the nearest thousand → **K**

Round 485 to the nearest hundred → **E**

Round 4,173 to the nearest thousand → **H**

Round 326 to the nearest hundred → **D**

Round 888 to the nearest hundred → **F**

Round 93 to the nearest ten → **G**

Scratch space:

CLUE 2 **Addition**

We found some dropped basketball gear and building blocks on the court. Let us add them up to see how many total items the suspect left behind.

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

T										T							T
800	817	321	925	767	925	631	321	284	800	348	322	925	713	546	800		
348	321	322	465	326	713	970	970	546	970	970	983	321	925				

$381 + 419 = \square \rightarrow \boxed{\text{T}}$	$257 + 289 = \square \rightarrow \boxed{\text{O}}$	$314 + 317 = \square \rightarrow \boxed{\text{P}}$
$189 + 132 = \square \rightarrow \boxed{\text{E}}$	$508 + 309 = \square \rightarrow \boxed{\text{H}}$	$209 + 117 = \square \rightarrow \boxed{\text{I}}$
$448 + 522 = \square \rightarrow \boxed{\text{G}}$	$152 + 170 = \square \rightarrow \boxed{\text{A}}$	$237 + 228 = \square \rightarrow \boxed{\text{R}}$
$369 + 344 = \square \rightarrow \boxed{\text{N}}$	$119 + 229 = \square \rightarrow \boxed{\text{W}}$	$453 + 530 = \square \rightarrow \boxed{\text{L}}$
$110 + 174 = \square \rightarrow \boxed{\text{C}}$	$528 + 397 = \square \rightarrow \boxed{\text{S}}$	$273 + 494 = \square \rightarrow \boxed{\text{U}}$

Scratch space:

CLUE 3 Subtraction

The thief broke some pixelated glass panes to escape the building. If we subtract the broken panes from the starting amount, we can tell how much energy they used.

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

T 193 294 334	T 193 294 520 334 899	827 398 697 334 409	409 294 520 513 587
381 398 827 772			

$450 - 257 = \square \rightarrow \boxed{\text{T}}$

$801 - 288 = \square \rightarrow \boxed{\text{N}}$

$665 - 78 = \square \rightarrow \boxed{\text{Y}}$

$566 - 168 = \square \rightarrow \boxed{\text{O}}$

$1164 - 392 = \square \rightarrow \boxed{\text{D}}$

$1222 - 323 = \square \rightarrow \boxed{\text{F}}$

$935 - 238 = \square \rightarrow \boxed{\text{V}}$

$660 - 326 = \square \rightarrow \boxed{\text{E}}$

$437 - 143 = \square \rightarrow \boxed{\text{H}}$

$558 - 177 = \square \rightarrow \boxed{\text{G}}$

$716 - 307 = \square \rightarrow \boxed{\text{S}}$

$1221 - 394 = \square \rightarrow \boxed{\text{L}}$

$724 - 204 = \square \rightarrow \boxed{\text{I}}$

Scratch space:

CLUE 4

Multiplication facts (1-12)

The suspect left footprints in rows on the sandy beach. By multiplying the rows of tracks, we can calculate how fast they were running.

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

W															
81	80	72	14	2	120	121	66	64	45	80	70	4	49	80	120
6	27	64	49												

$9 \times 9 = \square \rightarrow \text{W}$

$2 \times 1 = \square \rightarrow \text{U}$

$9 \times 3 = \square \rightarrow \text{A}$

$6 \times 12 = \square \rightarrow \text{F}$

$8 \times 10 = \square \rightarrow \text{E}$

$12 \times 10 = \square \rightarrow \text{N}$

$11 \times 11 = \square \rightarrow \text{D}$

$8 \times 8 = \square \rightarrow \text{I}$

$7 \times 10 = \square \rightarrow \text{L}$

$1 \times 4 = \square \rightarrow \text{G}$

$7 \times 7 = \square \rightarrow \text{R}$

$2 \times 7 = \square \rightarrow \text{O}$

$5 \times 9 = \square \rightarrow \text{X}$

$3 \times 2 = \square \rightarrow \text{H}$

$6 \times 11 = \square \rightarrow \text{P}$

Scratch space:

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

We recovered a bag of stolen gold blocks from the scene. If we divide them equally among the junior detectives, we can decode the final 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:

$8 \div 2 = \boxed{}$

$8 \div 8 = \boxed{}$

$48 \div 8 = \boxed{}$

$14 \div 7 = \boxed{}$

$16 \div 2 = \boxed{}$

$40 \div 8 = \boxed{}$

$72 \div 8 = \boxed{}$

$70 \div 7 = \boxed{}$

$99 \div 9 = \boxed{}$

$48 \div 4 = \boxed{}$

$56 \div 8 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain shoots a magic beam, then hides in an underwater cave.
2. The villain melts the basketball hoop, then leaves a trail of sparkly stardust.
3. The villain shoots a magic beam, then stomps on the court tiles.
4. The villain leaps over the court fence, then leaves a trail of sparkly stardust.
5. The villain builds a giant dirt tower, then hides in an underwater cave.
6. The villain splashes water everywhere, then stomps on the court tiles.
7. The villain builds a giant dirt tower, then slam dunks a bedrock block.
8. The villain splashes water everywhere, then hides in an underwater cave.
9. The villain melts the basketball hoop, then slam dunks a bedrock block.
10. The villain leaps over the court fence, then hides in an underwater cave.
11. The villain leaps over the court fence, then stomps on the court tiles.
12. The villain melts the basketball hoop, then teleports away with the trophy.

Answer Key

The Case of the Missing Diamond Basketball

Culprit: LeBron Rex

horn blasting · dino roaring · no goggles · pixel green · shiny gold

Trail: Start 21 → Clue 1 17 → Clue 2 9 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE THIEF DOES NOT HAVE THE DUNKING POWER"

Round 5,133 to the nearest thousand = 5000 (T) · Round 49 to the nearest ten = 50 (R) · Round 1,994 to the nearest thousand = 2000 (P) · Round 248 to the nearest hundred = 200 (I) · Round 620 to the nearest hundred = 600 (A) · Round 69 to the nearest ten = 70 (N) · Round 29 to the nearest ten = 30 (W) · Round 698 to the nearest hundred = 700 (V) · Round 43 to the nearest ten = 40 (U) · Round 16 to the nearest ten = 20 (S) · Round 8,712 to the nearest thousand = 9000 (O) · Round 7,783 to the nearest thousand = 8000 (K) · Round 485 to the nearest hundred = 500 (E) · Round 4,173 to the nearest thousand = 4000 (H) · Round 326 to the nearest hundred = 300 (D) · Round 888 to the nearest hundred = 900 (F) · Round 93 to the nearest ten = 90 (G)

Clue 2 (Addition): "THE SUSPECT WAS NOT WEARING GOGGLES"

$381 + 419 = 800$ (T) · $257 + 289 = 546$ (O) · $314 + 317 = 631$ (P) · $189 + 132 = 321$ (E) · $508 + 309 = 817$ (H) · $209 + 117 = 326$ (I) · $448 + 522 = 970$ (G) · $152 + 170 = 322$ (A) · $237 + 228 = 465$ (R) · $369 + 344 = 713$ (N) · $119 + 229 = 348$ (W) · $453 + 530 = 983$ (L) · $110 + 174 = 284$ (C) · $528 + 397 = 925$ (S) · $273 + 494 = 767$ (U)

Clue 3 (Subtraction): "THE THIEF LOVES SHINY GOLD"

$450 - 257 = 193$ (T) · $801 - 288 = 513$ (N) · $665 - 78 = 587$ (Y) · $566 - 168 = 398$ (O) · $1164 - 392 = 772$ (D) · $1222 - 323 = 899$ (F) · $935 - 238 = 697$ (V) · $660 - 326 = 334$ (E) · $437 - 143 = 294$ (H) · $558 - 177 = 381$ (G) · $716 - 307 = 409$ (S) · $1221 - 394 = 827$ (L) · $724 - 204 = 520$ (I)

Clue 4 (Multiplication facts (1-12)): "WE FOUND PIXEL GREEN HAIR"

$9 \times 9 = 81$ (W) · $2 \times 1 = 2$ (U) · $9 \times 3 = 27$ (A) · $6 \times 12 = 72$ (F) · $8 \times 10 = 80$ (E) · $12 \times 10 = 120$ (N) · $11 \times 11 = 121$ (D) · $8 \times 8 = 64$ (I) · $7 \times 10 = 70$ (L) · $1 \times 4 = 4$ (G) · $7 \times 7 = 49$ (R) · $2 \times 7 = 14$ (O) · $5 \times 9 = 45$ (X) · $3 \times 2 = 6$ (H) · $6 \times 11 = 66$ (P)

Clue 5 (Division facts (1-12)): surviving statement is box 3 → LeBron Rex

$8 \div 2 = 4$ · $8 \div 8 = 1$ · $48 \div 8 = 6$ · $14 \div 7 = 2$ · $16 \div 2 = 8$ · $40 \div 8 = 5$ · $72 \div 8 = 9$ · $70 \div 7 = 10$ · $99 \div 9 = 11$ · $48 \div 4 = 12$ · $56 \div 8 = 7$