



The Case of the Missing Golden Softball

Grade 5 math · Multiplication, Word problems, Fractions of a number, Order of operations, Division · Reading level grades 5-6

Detective: _____ Date: _____

The High Seas Softball Tournament was about to begin when someone stole the Golden Championship Softball right off home plate! Use your math skills and clues to catch the guilty pirate pitcher.

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 Pirate Pitcher is _____

Possible suspects

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

NAME	SIGNATURE PITCH	PIRATE GEAR	BATTING STANCE	BANDANA COLOR	SOFTBALL WEAKNESS
Sierra Romero	Spinning Screwball	Parrot Helmet	Righty Stance	Crimson Bandana	Loud Pop Flies
Skiff Skipper	Spinning Screwball	Anchor Cleats	Lefty Stance	Midnight Bandana	Loud Pop Flies
Monica Abbott	Fireball Fastball	Eyepatch Visor	Righty Stance	Crimson Bandana	Loud Pop Flies
Rudder Rita	Sneaky Changeup	Parrot Helmet	Righty Stance	Midnight Bandana	Loud Pop Flies
Sis Bates	Fireball Fastball	Parrot Helmet	Lefty Stance	Crimson Bandana	Bunted Balls
Keilani Ricketts	Fireball Fastball	Hook Glove	Lefty Stance	Midnight Bandana	Bunted Balls
Calico Jack	Sneaky Changeup	Pegleg Bat	Lefty Stance	Midnight Bandana	Loud Pop Flies
Cannonball Kate	Fireball Fastball	Eyepatch Visor	Righty Stance	Midnight Bandana	Bunted Balls
Tide Tim	Soaring Riseball	Anchor Cleats	Righty Stance	Crimson Bandana	Loud Pop Flies
Wave Wanda	Spinning Screwball	Anchor Cleats	Righty Stance	Gold Bandana	Bunted Balls
Jennie Finch	Spinning Screwball	Hook Glove	Lefty Stance	Gold Bandana	Loud Pop Flies
Salty Sam	Soaring Riseball	Pegleg Bat	Righty Stance	Crimson Bandana	Bunted Balls
Anchor Anne	Sneaky Changeup	Parrot Helmet	Lefty Stance	Crimson Bandana	Fast Grounders
First Mate Finn	Sneaky Changeup	Anchor Cleats	Righty Stance	Midnight Bandana	Loud Pop Flies
Rachel Garcia	Sneaky Changeup	Pegleg Bat	Lefty Stance	Crimson Bandana	Loud Pop Flies
Cat Osterman	Spinning Screwball	Eyepatch Visor	Lefty Stance	Midnight Bandana	Loud Pop Flies
Scupper Scott	Spinning Screwball	Pegleg Bat	Lefty Stance	Midnight Bandana	Fast Grounders
Pegleg Patty	Curving Dropball	Pegleg Bat	Lefty Stance	Midnight Bandana	Loud Pop Flies
Barnacle Bill	Fireball Fastball	Hook Glove	Righty Stance	Gold Bandana	Loud Pop Flies
Jolly Roger	Curving Dropball	Parrot Helmet	Lefty Stance	Midnight Bandana	Loud Pop Flies
Plank Pete	Spinning Screwball	Hook Glove	Righty Stance	Gold Bandana	Fast Grounders

CLUE 1
Multiplication facts (1-12)

To find the first clue calculate total batting practice swings by multiplying drills by reps.

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

T																T	
144	77	42	11	99	108	108	100	99	1	80	4	42	21	1	4	144	
										T							
60	21	42	100	1	42	54	42	84	100	144	49	77	11	99	21	4	5

$12 \times 12 = \square \rightarrow \text{**T**}$

$10 \times 10 = \square \rightarrow \text{**A**}$

$7 \times 6 = \square \rightarrow \text{**E**}$

$7 \times 7 = \square \rightarrow \text{**C**}$

$1 \times 11 = \square \rightarrow \text{**V**}$

$7 \times 11 = \square \rightarrow \text{**H**}$

$5 \times 1 = \square \rightarrow \text{**R**}$

$8 \times 10 = \square \rightarrow \text{**D**}$

$3 \times 7 = \square \rightarrow \text{**S**}$

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

$9 \times 12 = \square \rightarrow \text{**L**}$

$1 \times 1 = \square \rightarrow \text{**N**}$

$5 \times 12 = \square \rightarrow \text{**U**}$

$7 \times 12 = \square \rightarrow \text{**P**}$

$9 \times 11 = \square \rightarrow \text{**I**}$

$9 \times 6 = \square \rightarrow \text{**Y**}$

Scratch space:

CLUE 2

Word problems

The team equipment manager organized softball gear across several ships to unlock the next detail.

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

A witness saw the villain was

L									N	C	
103	55	19	17	92	73	17	111				55

.

Catcher found 33 base bags yesterday and 70 more today.
How many base bags in all?

Answer: →

L

Catcher found 8 softballs yesterday and 11 more today.
How many softballs in all?

Answer: →

F

Catcher found 21 cleats yesterday and 71 more today.
How many cleats in all?

Answer: →

Y

Catcher found 43 base bags yesterday and 30 more today.
How many base bags in all?

Answer: →

S

Catcher found 13 cleats yesterday and 4 more today. How
many cleats in all?

Answer: →

T

Catcher found 26 bats yesterday and 29 more today. How
many bats in all?

Answer: →

E

There were 132 softballs. 21 were used up. How many
softballs are left?

Answer: →

A

Scratch space:

CLUE 3
Fractions of a number

The deckhands calculated what fraction of the softball gear crates were packed for the game.

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

T								T								T				
8	11	30	6	21	36	34	8	30	17	34	9	9	14	8	17	34	8	17	11	
11	21	37	11	29	14	28	4	6	14	6	26	29	21	30	32					

$1/6 \text{ of } 48 = \square \rightarrow \boxed{\text{T}}$

$2/6 \text{ of } 108 = \square \rightarrow \boxed{\text{R}}$

$3/6 \text{ of } 64 = \square \rightarrow \boxed{\text{S}}$

$1/6 \text{ of } 156 = \square \rightarrow \boxed{\text{F}}$

$2/5 \text{ of } 10 = \square \rightarrow \boxed{\text{D}}$

$1/4 \text{ of } 148 = \square \rightarrow \boxed{\text{G}}$

$2/10 \text{ of } 140 = \square \rightarrow \boxed{\text{U}}$

$3/4 \text{ of } 28 = \square \rightarrow \boxed{\text{I}}$

$5/10 \text{ of } 22 = \square \rightarrow \boxed{\text{H}}$

$2/3 \text{ of } 51 = \square \rightarrow \boxed{\text{A}}$

$1/6 \text{ of } 54 = \square \rightarrow \boxed{\text{N}}$

$3/6 \text{ of } 34 = \square \rightarrow \boxed{\text{C}}$

$1/6 \text{ of } 174 = \square \rightarrow \boxed{\text{L}}$

$2/10 \text{ of } 70 = \square \rightarrow \boxed{\text{O}}$

$2/5 \text{ of } 75 = \square \rightarrow \boxed{\text{E}}$

$4/6 \text{ of } 9 = \square \rightarrow \boxed{\text{P}}$

Scratch space:

CLUE 4

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Diagram illustrating the arrangement of boxes and numbers:

Top row: 15 boxes. The first and last boxes contain the letter 'A'. The other boxes contain the numbers: 8, 61, 26, 55, 47, 69, 54, 54, 58, 17, 25, 53, 53, 69, 58.

Bottom row: 15 boxes. The 4th, 10th, and 12th boxes contain the letter 'A'. The other boxes contain the numbers: 7, 26, 58, 47, 26, 72, 75, 55, 46, 8, 47, 58, 8, 47, 8, 23, 26, 46, 69, 17.

$3 \times 6 - 10 = \square \rightarrow \boxed{\text{A}}$

$$44 + 7 \times 4 = \boxed{} \rightarrow \boxed{\text{G}}$$

$$38 + 4 \times 5 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$2 + 4 \times 6 = \boxed{} \rightarrow \boxed{\text{I}}$$

$7 \times 9 - 16 = \square \rightarrow \boxed{\text{N}}$

$10 + 6 \times 6 = \square \rightarrow \boxed{\mathbf{B}}$

$$42 + 9 \times 3 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$12 \times 7 - 9 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$39 + 5 \times 3 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$17 + 4 \times 9 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$1 + 3 \times 2 = \boxed{} \rightarrow \boxed{\text{M}}$$

$$25 + 6 \times 5 = \boxed{} \rightarrow \boxed{\text{T}}$$

$5 \times 6 - 7 = \square \rightarrow \boxed{\text{F}}$

$15 + 2 \times 5 = \square \rightarrow \boxed{0}$

$$3 + 7 \times 2 = \boxed{} \rightarrow \boxed{\mathbf{R}}$$

$$7 \times 11 - 16 = \boxed{} \rightarrow \boxed{\mathbf{W}}$$

2

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

Divide the dugouts equally among all pirate crews to reveal the final lead.

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:

$54 \div 9 = \boxed{}$

$22 \div 11 = \boxed{}$

$8 \div 8 = \boxed{}$

$25 \div 5 = \boxed{}$

$32 \div 8 = \boxed{}$

$33 \div 11 = \boxed{}$

$88 \div 11 = \boxed{}$

$81 \div 9 = \boxed{}$

$20 \div 2 = \boxed{}$

$77 \div 7 = \boxed{}$

$96 \div 8 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain launched a spinning screwball, then stamped with heavy anchor cleats.
2. The villain pitched a dropping curve, then squawked under a parrot helmet.
3. The villain tossed a sneaky changeup, then squawked under a parrot helmet.
4. The villain threw a fiery fastball, then caught with a sharp hook glove.
5. The villain threw a fiery fastball, then swung a wooden pegleg bat.
6. The villain tossed a sneaky changeup, then swung a wooden pegleg bat.
7. The villain pitched a dropping curve, then swung a wooden pegleg bat.
8. The villain threw a fiery fastball, then stamped with heavy anchor cleats.
9. The villain snapped a soaring riseball, then squawked under a parrot helmet.
10. The villain snapped a soaring riseball, then caught with a sharp hook glove.
11. The villain tossed a sneaky changeup, then caught with a sharp hook glove.
12. The villain threw a fiery fastball, then adjusted a shiny eyepatch visor.

Answer Key

The Case of the Missing Golden Softball

Culprit: Pegleg Patty

Curving Dropball · Pegleg Bat · Lefty Stance · Midnight Bandana · Loud Pop Flies

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT USE AN EYEPATCH VISOR"

$12 \times 12 = 144$ (T) · $10 \times 10 = 100$ (A) · $7 \times 6 = 42$ (E) · $7 \times 7 = 49$ (C) · $1 \times 11 = 11$ (V) · $7 \times 11 = 77$ (H) · $5 \times 1 = 5$ (R) · $8 \times 10 = 80$ (D) · $3 \times 7 = 21$ (S) · $2 \times 2 = 4$ (O) · $9 \times 12 = 108$ (L) · $1 \times 1 = 1$ (N) · $5 \times 12 = 60$ (U) · $7 \times 12 = 84$ (P) · $9 \times 11 = 99$ (I) · $9 \times 6 = 54$ (Y)

Clue 2 (Word problems): "LEFTY STANCE"

Catcher found 33 base bags yesterday and 70 more today. How many base bags in all? = 103 (L) · Catcher found 8 softballs yesterday and 11 more today. How many softballs in all? = 19 (F) · Catcher found 21 cleats yesterday and 71 more today. How many cleats in all? = 92 (Y) · Catcher found 43 base bags yesterday and 30 more today. How many base bags in all? = 73 (S) · Catcher found 13 cleats yesterday and 4 more today. How many cleats in all? = 17 (T) · Catcher found 26 bats yesterday and 29 more today. How many bats in all? = 55 (E) · There were 132 softballs. 21 were used up. How many softballs are left? = 111 (A)

Clue 3 (Fractions of a number): "THE PIRATE CANNOT CATCH HIGH LOUD POP FLIES"

$1/6$ of 48 = 8 (T) · $2/6$ of 108 = 36 (R) · $3/6$ of 64 = 32 (S) · $1/6$ of 156 = 26 (F) · $2/5$ of 10 = 4 (D) · $1/4$ of 148 = 37 (G) · $2/10$ of 140 = 28 (U) · $3/4$ of 28 = 21 (I) · $5/10$ of 22 = 11 (H) · $2/3$ of 51 = 34 (A) · $1/6$ of 54 = 9 (N) · $3/6$ of 34 = 17 (C) · $1/6$ of 174 = 29 (L) · $2/10$ of 70 = 14 (O) · $2/5$ of 75 = 30 (E) · $4/6$ of 9 = 6 (P)

Clue 4 (Order of operations): "A WITNESS DROPPED A MIDNIGHT BANDANA FIBER"

$3 \times 6 - 10 = 8$ (A) · $44 + 7 \times 4 = 72$ (G) · $38 + 4 \times 5 = 58$ (D) · $2 + 4 \times 6 = 26$ (I) · $7 \times 9 - 16 = 47$ (N) · $10 + 6 \times 6 = 46$ (B) · $42 + 9 \times 3 = 69$ (E) · $12 \times 7 - 9 = 75$ (H) · $39 + 5 \times 3 = 54$ (S) · $17 + 4 \times 9 = 53$ (P) · $1 + 3 \times 2 = 7$ (M) · $25 + 6 \times 5 = 55$ (T) · $5 \times 6 - 7 = 23$ (F) · $15 + 2 \times 5 = 25$ (O) · $3 + 7 \times 2 = 17$ (R) · $7 \times 11 - 16 = 61$ (W)

Clue 5 (Division facts (1-12)): surviving statement is box 7 → Pegleg Patty

$54 \div 9 = 6$ · $22 \div 11 = 2$ · $8 \div 8 = 1$ · $25 \div 5 = 5$ · $32 \div 8 = 4$ · $33 \div 11 = 3$ · $88 \div 11 = 8$ · $81 \div 9 = 9$ · $20 \div 2 = 10$ · $77 \div 7 = 11$ · $96 \div 8 = 12$