



The Water Tower Capers

Grade 5 math · Fractions of a number, Bar models, Order of operations, Multiplication, Missing addends · Reading level grades 5-6

Detective: _____ Date: _____

Yakko, Wakko, and Dot are ready to film, but someone has locked up their beloved water tower! Worse, they stole the giant golden mallet used for sound effects. It is up to you to search the soundstages, follow the goofy tracks, and unmask the toon thief before the cartoon is cancelled!

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 Toon Thief is _____

Possible suspects

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

NAME	SIGNATURE GAG	CARTOON GEAR	ANVIL GRIP	TOON HAIR STYLE	HOW TO STOP THEM
Chicken Boo	Pie Toss	ACME Rocket	Left Handed	Slicked Back	Squirting Flower
Ralph Guard	Pie Toss	ACME Rocket	Left Handed	Spiky Ears	Banana Peel
Dot Warner	Pie Toss	ACME Rocket	Right Handed	Slicked Back	Banana Peel
Hello Nurse	Pie Toss	Portable Hole	Right Handed	Slicked Back	Banana Peel
Buttons Dog	Seltzer Spray	ACME Rocket	Left Handed	Spiky Ears	Banana Peel
Sid Squid	Seltzer Spray	Giant Magnet	Right Handed	Spiky Ears	Loud Gong
Skippy Squirrel	Pie Toss	Giant Magnet	Left Handed	Floppy Hair	Loud Gong
Thaddeus Plotz	Opera Sing	Portable Hole	Left Handed	Spiky Ears	Banana Peel
Pinky	Seltzer Spray	Giant Magnet	Right Handed	Slicked Back	Banana Peel
Wakko Warner	Opera Sing	ACME Rocket	Right Handed	Slicked Back	Squirting Flower
Dr Scratchansniff	Rapid Talk	Giant Magnet	Right Handed	Floppy Hair	Loud Gong
Yakko Warner	Mallet Smash	Whoopee Cushion	Right Handed	Slicked Back	Loud Gong
Rita Cat	Pie Toss	Fake Mustache	Left Handed	Slicked Back	Loud Gong
Bobby Pigeon	Opera Sing	Giant Magnet	Right Handed	Slicked Back	Banana Peel
Pip Pipsqueak	Mallet Smash	Whoopee Cushion	Left Handed	Slicked Back	Banana Peel
Squit Pigeon	Mallet Smash	Whoopee Cushion	Right Handed	Slicked Back	Banana Peel
The Brain	Rapid Talk	ACME Rocket	Right Handed	Slicked Back	Loud Gong
Pesto Pigeon	Mallet Smash	Whoopee Cushion	Right Handed	Floppy Hair	Banana Peel
Runt Dog	Mallet Smash	Fake Mustache	Left Handed	Floppy Hair	Squirting Flower
Slappy Squirrel	Seltzer Spray	Fake Mustache	Right Handed	Slicked Back	Squirting Flower
Baloney Dinosaur	Seltzer Spray	Giant Magnet	Right Handed	Floppy Hair	Loud Gong

Fractions of a number

Yakko helps you divide a giant stack of movie scripts into equal fractions to find a page of the secret case file.

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

Diagram illustrating a sequence of numbers arranged in two rows, with some boxes highlighted in orange and labeled 'T'.

Top Row (18 boxes):

- Box 1 (Orange, T): 11
- Box 2: 15
- Box 3: 22
- Box 4: 10
- Box 5: 2
- Box 6: 38
- Box 7: 38
- Box 8: 12
- Box 9: 2
- Box 10: 13
- Box 11: 30
- Box 12: 2
- Box 13: 30
- Box 14: 13
- Box 15: 25
- Box 16 (Orange, T): 11
- Box 17: 40
- Box 18: 33
- Box 19: 22

Bottom Row (14 boxes):

- Box 1: 12
- Box 2: 17
- Box 3: 25
- Box 4: 27
- Box 5 (Orange, T): 11
- Box 6: 12
- Box 7: 16
- Box 8: 38
- Box 9: 22
- Box 10: 15
- Box 11: 25
- Box 12: 38
- Box 13: 22

$\frac{1}{8}$ of 88 = $\rightarrow$ **T**

$1/5$ of 125 = $\rightarrow$ **0**

$$2/8 \text{ of } 68 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$1/2 \text{ of } 20 = \boxed{} \rightarrow \boxed{\mathbf{v}}$$

2/6 of 99 = → **S**

$$2/4 \text{ of } 26 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$\frac{3}{4} \text{ of } 36 = \boxed{} \rightarrow \boxed{\text{R}}$$

$4/8$ of $44 = \boxed{} \rightarrow \boxed{\text{E}}$

$$\frac{1}{5} \text{ of } 75 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$2/8 \text{ of } 160 = \boxed{} \rightarrow \boxed{\text{U}}$$

$2/10$ of $60 = \boxed{} \rightarrow \boxed{\text{A}}$

$3/4$ of 40 = $\rightarrow$ **D**

$\frac{2}{3}$ of 24 = $\rightarrow$ **B**

$2/3$ of 3 = $\rightarrow$

$$2/4 \text{ of } 76 = \boxed{} \rightarrow \boxed{\text{L}}$$

Scratch space:

CLUE 2

Bar model word problems

Wakko draws bar models on the pavement with chalk to compare the lengths of chewed-up film reels left behind.

Draw a bar model to solve each word problem, then write its letter in the boxes to fill in the missing word.

A witness saw the villain was R D E D .

26 37 45 13 70 13 127 66

The red team has 52 anvils and the blue team has 26 anvils. How many more anvils does the red team have?

draw a bar model

Answer: → R

One group collected 97 mallets and another group collected 30 mallets. How many mallets in all?

draw a bar model

Answer: → A

Wakko used $\frac{1}{2}$ of the balloons on the first day. The other 33 balloons were used the next day. How many balloons were there in all?

draw a bar model

Answer: → N

One group collected 42 anvils and another group collected 3 anvils. How many anvils in all?

draw a bar model

Answer: → G

Wakko shares 148 pies equally among 4 teams. How many pies does each team get?

draw a bar model

Answer: → I

Wakko shares 140 pies equally among 2 teams. How many pies does each team get?

draw a bar model

Answer: → T

Wakko has 78 balloons, packed 6 to a bag. How many bags can be filled?

draw a bar model

Answer: → H

CLUE 3
Order of operations

Dot participates in a wacky studio game show where solving a multi-step math puzzle unlocks the next hint.

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

T			T														
75	73	66	75	73	33	66	14	60	68	33	12	12	66	74	13	45	79

6	79	45	79	45	79	12	66	66	68

$9 \times 11 - 24 = \square \rightarrow \boxed{\text{T}}$

$59 + 3 \times 3 = \square \rightarrow \boxed{\text{L}}$

$9 \times 4 - 30 = \square \rightarrow \boxed{\text{B}}$

$9 \times 11 - 25 = \square \rightarrow \boxed{\text{D}}$

$12 \times 8 - 17 = \square \rightarrow \boxed{\text{A}}$

$24 + 4 \times 9 = \square \rightarrow \boxed{\text{S}}$

$17 + 4 \times 4 = \square \rightarrow \boxed{\text{I}}$

$5 + 3 \times 3 = \square \rightarrow \boxed{\text{F}}$

$56 + 5 \times 2 = \square \rightarrow \boxed{\text{E}}$

$7 + 2 \times 3 = \square \rightarrow \boxed{\text{O}}$

$3 \times 11 - 21 = \square \rightarrow \boxed{\text{P}}$

$9 \times 10 - 17 = \square \rightarrow \boxed{\text{H}}$

$8 \times 7 - 11 = \square \rightarrow \boxed{\text{N}}$

Scratch space:

CLUE 4
Multiplication facts (1-12)

Ralph the Guard counts rows of fallen heavy anvils by multiplying them to figure out which stage was raided.

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

S															
54	40	70	120	81	72	11	14	96	120	81	4	96	70	90	

S						S									
54	88	90	96	56	11	54	3	72	90	72	40	72	9	88	

14	72	4	70	56	11	

$9 \times 6 = \square \rightarrow$ S	$9 \times 9 = \square \rightarrow$ K	$7 \times 2 = \square \rightarrow$ B
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$10 \times 12 = \square \rightarrow$ C	$7 \times 8 = \square \rightarrow$ N	$10 \times 7 = \square \rightarrow$ I
---	---	--

$10 \times 9 = \square \rightarrow$ R	$8 \times 12 = \square \rightarrow$ A	$4 \times 1 = \square \rightarrow$ H
--	--	---

$4 \times 10 = \square \rightarrow$ L	$8 \times 9 = \square \rightarrow$ E	$11 \times 8 = \square \rightarrow$ T
--	---	--

$1 \times 3 = \square \rightarrow$ W	$1 \times 11 = \square \rightarrow$ D	$3 \times 3 = \square \rightarrow$ F
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Scratch space:

CLUE 5**Missing addends - the last clue**

Dr Scratchansniff notices several sound effect records are missing from his shelf and calculates the exact number left.

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:

$14 + \underline{\quad} = 26$

$6 + \underline{\quad} = 11$

$21 + \underline{\quad} = 31$

$22 + \underline{\quad} = 25$

$4 + \underline{\quad} = 12$

$33 + \underline{\quad} = 34$

$34 + \underline{\quad} = 38$

$1 + \underline{\quad} = 7$

$7 + \underline{\quad} = 9$

$35 + \underline{\quad} = 44$

$22 + \underline{\quad} = 29$

Step 2 - cross out the sentence with each answer:

1. The villain talked in rapid-fire riddles, then placed a sneaky whoopee cushion.
2. The villain sang a dramatic opera song, then escaped through a portable hole.
3. The villain sang a dramatic opera song, then placed a sneaky whoopee cushion.
4. The villain tossed a custard pie, then placed a sneaky whoopee cushion.
5. The villain sprayed fizzy seltzer water, then dragged a giant magnet.
6. The villain sprayed fizzy seltzer water, then donned a fake mustache.
7. The villain sprayed fizzy seltzer water, then blasted away on an ACME rocket.
8. The villain tossed a custard pie, then donned a fake mustache.
9. The villain tossed a custard pie, then dragged a giant magnet.
10. The villain tossed a custard pie, then blasted away on an ACME rocket.
11. The villain sang a dramatic opera song, then dragged a giant magnet.
12. The villain smashed a giant mallet, then placed a sneaky whoopee cushion.

Answer Key

The Water Tower Capers

Culprit: Bobby Pigeon

Opera Sing · Giant Magnet · Right Handed · Slicked Back · Banana Peel

Trail: Start 21 → Clue 1 19 → Clue 2 12 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE VILLAIN DID NOT USE A PORTABLE HOLE"

$\frac{1}{8}$ of 88 = 11 (T) · $\frac{1}{5}$ of 125 = 25 (O) · $\frac{2}{8}$ of 68 = 17 (P) · $\frac{1}{2}$ of 20 = 10 (V) · $\frac{2}{6}$ of 99 = 33 (S) · $\frac{2}{4}$ of 26 = 13 (N) · $\frac{3}{4}$ of 36 = 27 (R) · $\frac{4}{8}$ of 44 = 22 (E) · $\frac{1}{5}$ of 75 = 15 (H) · $\frac{2}{8}$ of 160 = 40 (U) · $\frac{2}{10}$ of 60 = 12 (A) · $\frac{3}{4}$ of 40 = 30 (D) · $\frac{2}{3}$ of 24 = 16 (B) · $\frac{2}{3}$ of 3 = 2 (I) · $\frac{2}{4}$ of 76 = 38 (L)

Clue 2 (Bar model word problems): "RIGHT HANDED"

The red team has 52 anvils and the blue team has 26 anvils. How many more anvils does the red team have? = 26 (R) · One group collected 97 mallets and another group collected 30 mallets. How many mallets in all? = 127 (A) · Wakko used $\frac{1}{2}$ of the balloons on the first day. The other 33 balloons were used the next day. How many balloons were there in all? = 66 (N) · One group collected 42 anvils and another group collected 3 anvils. How many anvils in all? = 45 (G) · Wakko shares 148 pies equally among 4 teams. How many pies does each team get? = 37 (I) · Wakko shares 140 pies equally among 2 teams. How many pies does each team get? = 70 (T) · Wakko has 78 balloons, packed 6 to a bag. How many bags can be filled? = 13 (H)

Clue 3 (Order of operations): "THE THIEF SLIPPED ON A BANANA PEEL"

$9 \times 11 - 24 = 75$ (T) · $59 + 3 \times 3 = 68$ (L) · $9 \times 4 - 30 = 6$ (B) · $9 \times 11 - 25 = 74$ (D) · $12 \times 8 - 17 = 79$ (A) · $24 + 4 \times 9 = 60$ (S) · $17 + 4 \times 4 = 33$ (I) · $5 + 3 \times 3 = 14$ (F) · $56 + 5 \times 2 = 66$ (E) · $7 + 2 \times 3 = 13$ (O) · $3 \times 11 - 21 = 12$ (P) · $9 \times 10 - 17 = 73$ (H) · $8 \times 7 - 11 = 45$ (N)

Clue 4 (Multiplication facts (1-12)): "SLICKED BACK HAIR STRANDS WERE LEFT BEHIND"

$9 \times 6 = 54$ (S) · $9 \times 9 = 81$ (K) · $7 \times 2 = 14$ (B) · $10 \times 12 = 120$ (C) · $7 \times 8 = 56$ (N) · $10 \times 7 = 70$ (I) · $10 \times 9 = 90$ (R) · $8 \times 12 = 96$ (A) · $4 \times 1 = 4$ (H) · $4 \times 10 = 40$ (L) · $8 \times 9 = 72$ (E) · $11 \times 8 = 88$ (T) · $1 \times 3 = 3$ (W) · $1 \times 11 = 11$ (D) · $3 \times 3 = 9$ (F)

Clue 5 (Missing addends): surviving statement is box 11 → Bobby Pigeon

$14 + \underline{\quad} = 26 = 12$ · $6 + \underline{\quad} = 11 = 5$ · $21 + \underline{\quad} = 31 = 10$ · $22 + \underline{\quad} = 25 = 3$ · $4 + \underline{\quad} = 12 = 8$ · $33 + \underline{\quad} = 34 = 1$ · $34 + \underline{\quad} = 38 = 4$ · $1 + \underline{\quad} = 7 = 6$ · $7 + \underline{\quad} = 9 = 2$ · $35 + \underline{\quad} = 44 = 9$ · $22 + \underline{\quad} = 29 = 7$