The Great Thanksgiving Parade Mystery

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

Detective: _____ **Date:** _____

The annual Harvest Parade was about to start when someone messed up the float controls and hid the ceremonial golden wishbone. Work through the math clues to identify the suspect.

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 Parade Prankster is _____

Possible suspects

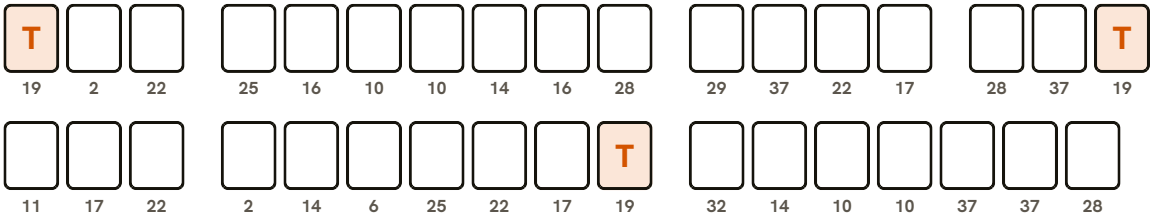
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	FEAST GADGET	PARADE FLOAT PROP	CARVING HAND	FEATHER TRIM	KITCHEN MISHAP
Rusty Barns	Pie Catapult	Giant Drumstick	Left handed	Amber Feathers	Mashed Potato Slip
Forrest Leaf	Cranberry Laser	Maple Leaf Banner	Right handed	Crimson Feathers	Sticky Molasses
Bobby Flay	Pie Catapult	Maple Leaf Banner	Right handed	Amber Feathers	Sticky Molasses
Pilgrim Pete	Whisk Launcher	Harvest Balloon	Right handed	Amber Feathers	Sticky Molasses
Hazel Nut	Pie Catapult	Maple Leaf Banner	Left handed	Crimson Feathers	Flour Cloud
Patty Pumpkin	Gravy Blaster	Giant Drumstick	Right handed	Amber Feathers	Sticky Molasses
Penny Pie	Whisk Launcher	Giant Drumstick	Left handed	Crimson Feathers	Mashed Potato Slip
Ina Garten	Pie Catapult	Acorn Horn	Right handed	Crimson Feathers	Sticky Molasses
Cranberry Chris	Whisk Launcher	Maple Leaf Banner	Right handed	Amber Feathers	Sticky Molasses
Ginger Spice	Whisk Launcher	Cornucopia Shield	Right handed	Crimson Feathers	Mashed Potato Slip
Barnaby Baste	Pie Catapult	Giant Drumstick	Left handed	Amber Feathers	Sticky Molasses
Hunter Green	Cranberry Laser	Maple Leaf Banner	Left handed	Crimson Feathers	Sticky Molasses
Gordon Ramsay	Whisk Launcher	Giant Drumstick	Left handed	Crimson Feathers	Flour Cloud
Sierra Woods	Cranberry Laser	Maple Leaf Banner	Right handed	Amber Feathers	Mashed Potato Slip
Maize Miller	Whisk Launcher	Giant Drumstick	Left handed	Bronze Feathers	Mashed Potato Slip
Julia Child	Pie Catapult	Giant Drumstick	Right handed	Bronze Feathers	Mashed Potato Slip
Gobble Grace	Whisk Launcher	Cornucopia Shield	Left handed	Amber Feathers	Mashed Potato Slip
Alton Brown	Whisk Launcher	Cornucopia Shield	Left handed	Crimson Feathers	Sticky Molasses
Guy Fieri	Cranberry Laser	Acorn Horn	Right handed	Amber Feathers	Sticky Molasses
Autumn Reed	Pie Catapult	Maple Leaf Banner	Left handed	Bronze Feathers	Flour Cloud
Emeril Lagasse	Stuffing Cannon	Giant Drumstick	Right handed	Amber Feathers	Flour Cloud

CLUE 1 Fractions of a number

The Grand Marshal needs your help adding up all the recipe totals and parade counts to reveal the first clue.

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



1/10 of 190 = ☐ → T

5/10 of 50 = ☐ → V

2/6 of 66 = ☐ → E

1/6 of 36 = ☐ → R

1/5 of 80 = ☐ → I

5/10 of 28 = ☐ → A

1/2 of 58 = ☐ → D

5/10 of 22 = ☐ → U

1/8 of 16 = ☐ → H

2/8 of 40 = ☐ → L

1/2 of 56 = ☐ → N

1/4 of 128 = ☐ → B

1/4 of 68 = ☐ → S

1/4 of 148 = ☐ → O

Scratch space:

CLUE 2 Multi-step word problems

A giant pie was divided into portions, and calculating the exact fraction gives us our next key detail.

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

A witness saw the villain was

R								D	E	D
57	61	65	69	64	69	66	50			

.

Chef Gobble filled 3 boxes with 8 cranberry cans each, then found 33 more cranberry cans. How many cranberry cans are there in all?

Answer: ☐ → **R**

Chef Gobble collected 159 marching drums in the morning and 161 marching drums in the afternoon, then split them equally among 5 Turkey Rescue Squad. How many marching drums did each get?

Answer: ☐ → **T**

There were 619 marching drums in all. 25 marching drums were set aside. The rest were shared equally among 9 Turkey Rescue Squad. How many marching drums did each get?

Answer: ☐ → **A**

Chef Gobble collected 222 marching drums in the morning and 38 marching drums in the afternoon, then split them equally among 4 Turkey Rescue Squad. How many marching drums did each get?

Answer: ☐ → **G**

There were 259 harvest floats in all. 9 harvest floats were set aside. The rest were shared equally among 5 Turkey Rescue Squad. How many harvest floats did each get?

Answer: ☐ → **N**

There were 270 roast turkeys in all. 2 Turkey Rescue Squad used 13 roast turkeys each. The other 4 Turkey Rescue Squad shared the rest equally. How many roast turkeys did each of the other Turkey Rescue Squad get?

Answer: ☐ → **I**

There were 465 pumpkin pies in all. 3 Turkey Rescue Squad used 17 pumpkin pies each. The other 6 Turkey Rescue Squad shared the rest equally. How many pumpkin pies did each of the other Turkey Rescue Squad get?

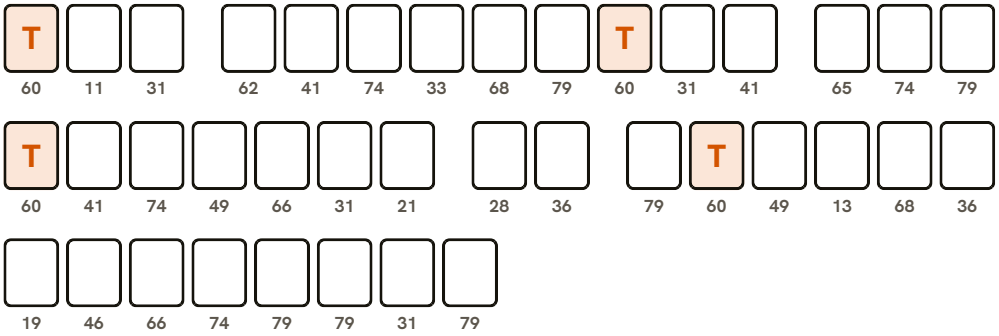
Answer: ☐ → **H**

Scratch space:

CLUE 3 Order of operations

To unlock the parade vault security lock, solve the multi-step math equation on the control panel.

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



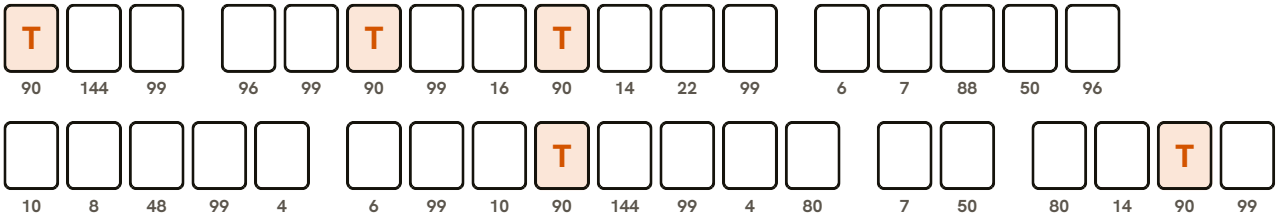
12 × 7 - 24 = ☐ → T	4 × 11 - 16 = ☐ → B	6 × 12 - 26 = ☐ → O
35 + 2 × 7 = ☐ → I	8 × 8 - 28 = ☐ → Y	3 × 5 - 4 = ☐ → H
4 + 5 × 3 = ☐ → M	8 × 11 - 26 = ☐ → P	1 + 8 × 8 = ☐ → W
23 + 4 × 2 = ☐ → E	11 × 4 - 11 = ☐ → N	48 + 6 × 3 = ☐ → L
11 × 9 - 25 = ☐ → A	25 + 9 × 6 = ☐ → S	1 + 4 × 3 = ☐ → C
11 × 4 - 23 = ☐ → D	12 × 5 - 19 = ☐ → R	9 × 8 - 4 = ☐ → K

Scratch space:

CLUE 4 Multiplication facts (1-12)

Counting rows of decorative mini-turkeys along the parade route uncovers another clue.

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



10 × 9 = ☐ → T

12 × 8 = ☐ → D

8 × 2 = ☐ → C

4 × 12 = ☐ → B

2 × 11 = ☐ → V

11 × 9 = ☐ → E

10 × 8 = ☐ → S

7 × 2 = ☐ → I

12 × 12 = ☐ → H

8 × 11 = ☐ → U

10 × 5 = ☐ → N

1 × 7 = ☐ → O

1 × 8 = ☐ → M

5 × 2 = ☐ → A

4 × 1 = ☐ → R

6 × 1 = ☐ → F

Scratch space:

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

> Sharing out the remaining feast tickets equally among the volunteers unmasks the final trait.

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:

44 ÷ 11 = ☐	72 ÷ 9 = ☐	24 ÷ 12 = ☐	84 ÷ 7 = ☐	12 ÷ 4 = ☐
66 ÷ 6 = ☐	80 ÷ 8 = ☐	11 ÷ 11 = ☐	42 ÷ 7 = ☐	7 ÷ 1 = ☐
54 ÷ 6 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain zapped with cranberry laser, then unfurled maple leaf banner.
2. The villain fired the gravy blaster, then waved the giant drumstick.
3. The villain flung the pie catapult, then tooted the acorn horn.
4. The villain spun the whisk launcher, then unfurled maple leaf banner.
5. The villain zapped with cranberry laser, then tooted the acorn horn.
6. The villain fired the gravy blaster, then blocked with cornucopia shield.
7. The villain launched the stuffing cannon, then tooted the acorn horn.
8. The villain flung the pie catapult, then unfurled maple leaf banner.
9. The villain launched the stuffing cannon, then waved the giant drumstick.
10. The villain spun the whisk launcher, then blocked with cornucopia shield.
11. The villain flung the pie catapult, then floated on harvest balloon.
12. The villain zapped with cranberry laser, then waved the giant drumstick.

TEACHER / PARENT

Answer Key

The Great Thanksgiving Parade Mystery

Culprit: Guy Fieri

Cranberry Laser · Acorn Horn · Right handed · Amber Feathers · Sticky Molasses

Trail: Start 21 → Clue 1 20 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE VILLAIN DOES NOT USE HARVEST BALLOON"

1/10 of 190 = 19 (T) · 5/10 of 50 = 25 (V) · 2/6 of 66 = 22 (E) · 1/6 of 36 = 6 (R) · 1/5 of 80 = 16 (I) · 5/10 of 28 = 14 (A) · 1/2 of 58 = 29 (D) · 5/10 of 22 = 11 (U) · 1/8 of 16 = 2 (H) · 2/8 of 40 = 10 (L) · 1/2 of 56 = 28 (N) · 1/4 of 128 = 32 (B) · 1/4 of 68 = 17 (S) · 1/4 of 148 = 37 (O)

Clue 2 (Multi-step word problems): "RIGHT HANDED"

Chef Gobble filled 3 boxes with 8 cranberry cans each, then found 33 more cranberry cans. How many cranberry cans are there in all? = 57 (R) · Chef Gobble collected 159 marching drums in the morning and 161 marching drums in the afternoon, then split them equally among 5 Turkey Rescue Squad. How many marching drums did each get? = 64 (T) · There were 619 marching drums in all. 25 marching drums were set aside. The rest were shared equally among 9 Turkey Rescue Squad. How many marching drums did each get? = 66 (A) · Chef Gobble collected 222 marching drums in the morning and 38 marching drums in the afternoon, then split them equally among 4 Turkey Rescue Squad. How many marching drums did each get? = 65 (G) · There were 259 harvest floats in all. 9 harvest floats were set aside. The rest were shared equally among 5 Turkey Rescue Squad. How many harvest floats did each get? = 50 (N) · There were 270 roast turkeys in all. 2 Turkey Rescue Squad used 13 roast turkeys each. The other 4 Turkey Rescue Squad shared the rest equally. How many roast turkeys did each of the other Turkey Rescue Squad get? = 61 (I) · There were 465 pumpkin pies in all. 3 Turkey Rescue Squad used 17 pumpkin pies each. The other 6 Turkey Rescue Squad shared the rest equally. How many pumpkin pies did each of the other Turkey Rescue Squad get? = 69 (H)

Clue 3 (Order of operations): "THE PRANKSTER WAS TRAILED BY STICKY MOLASSES"

12 × 7 - 24 = 60 (T) · 4 × 11 - 16 = 28 (B) · 6 × 12 - 26 = 46 (O) · 35 + 2 × 7 = 49 (I) · 8 × 8 - 28 = 36 (Y) · 3 × 5 - 4 = 11 (H) · 4 + 5 × 3 = 19 (M) · 8 × 11 - 26 = 62 (P) · 1 + 8 × 8 = 65 (W) · 23 + 4 × 2 = 31 (E) · 11 × 4 - 11 = 33 (N) · 48 + 6 × 3 = 66 (L) · 11 × 9 - 25 = 74 (A) · 25 + 9 × 6 = 79 (S) · 1 + 4 × 3 = 13 (C) · 11 × 4 - 23 = 21 (D) · 12 × 5 - 19 = 41 (R) · 9 × 8 - 4 = 68 (K)

Clue 4 (Multiplication facts (1-12)): "THE DETECTIVE FOUND AMBER FEATHERS ON SITE"

10 × 9 = 90 (T) · 12 × 8 = 96 (D) · 8 × 2 = 16 (C) · 4 × 12 = 48 (B) · 2 × 11 = 22 (V) · 11 × 9 = 99 (E) · 10 × 8 = 80 (S) · 7 × 2 = 14 (I) · 12 × 12 = 144 (H) · 8 × 11 = 88 (U) · 10 × 5 = 50 (N) · 1 × 7 = 7 (O) · 1 × 8 = 8 (M) · 5 × 2 = 10 (A) · 4 × 1 = 4 (R) · 6 × 1 = 6 (F)

Clue 5 (Division facts (1-12)): surviving statement is box 5 → Guy Fieri

44 ÷ 11 = 4 · 72 ÷ 9 = 8 · 24 ÷ 12 = 2 · 84 ÷ 7 = 12 · 12 ÷ 4 = 3 · 66 ÷ 6 = 11 · 80 ÷ 8 = 10 · 11 ÷ 11 = 1 · 42 ÷ 7 = 6 · 7 ÷ 1 = 7 · 54 ÷ 6 = 9