



The Harvest Festival Heist

Grade 7 math · Multiplication, Integers, Percentages, Order of operations, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone stole the Giant Golden Pumpkin Treat right before the spooky festival contest! Examine the evidence and track down the culprit.

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 Pumpkin Prowler is _____

Possible suspects

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

NAME	MAIN MAGIC	EXTRA TRICK	DOMINANT HAND	WIG COLOR	WEAKNESS
Hazel Hex	Ghostly Shriek	Potion Splash	Left Handed	Orange Wig	Salty Pretzel
Bruno Broom	Shadow Stealth	Candy Toss	Left Handed	Orange Wig	Flashlight
Buster Boo	Shadow Stealth	Glow Eyes	Right Handed	Green Wig	Flashlight
Manny Mummy	Pumpkin Blast	Potion Splash	Left Handed	Orange Wig	Flashlight
Shadow Sean	Ghostly Shriek	Haunted Broom	Left Handed	Orange Wig	Flashlight
Howie Howler	Shadow Stealth	Potion Splash	Left Handed	Orange Wig	Garlic Spray
Penny Cobweb	Spider Web Trap	Haunted Broom	Right Handed	Purple Wig	Garlic Spray
Goblin Gabe	Pumpkin Blast	Haunted Broom	Left Handed	Orange Wig	Salty Pretzel
Sammie Skeleton	Bat Swarm	Haunted Broom	Left Handed	Purple Wig	Flashlight
Drake Dracula	Pumpkin Blast	Haunted Broom	Left Handed	Purple Wig	Garlic Spray
Casper Creep	Shadow Stealth	Glow Eyes	Left Handed	Green Wig	Flashlight
Frankie Stein	Bat Swarm	Haunted Broom	Left Handed	Orange Wig	Salty Pretzel
Bella Bat	Ghostly Shriek	Potion Splash	Left Handed	Orange Wig	Flashlight
Wendy Witch	Shadow Stealth	Candy Toss	Right Handed	Orange Wig	Garlic Spray
Candy Carmen	Bat Swarm	Candy Toss	Right Handed	Orange Wig	Flashlight
Spooky Sam	Shadow Stealth	Fog Cloud	Right Handed	Green Wig	Garlic Spray
Pippa Pumpkin	Shadow Stealth	Glow Eyes	Right Handed	Purple Wig	Flashlight
Trixie Treat	Shadow Stealth	Potion Splash	Left Handed	Green Wig	Flashlight
Jack Lantern	Spider Web Trap	Candy Toss	Right Handed	Orange Wig	Salty Pretzel
Ollie Owl	Shadow Stealth	Fog Cloud	Left Handed	Orange Wig	Flashlight
Rita Raven	Ghostly Shriek	Potion Splash	Left Handed	Green Wig	Salty Pretzel

CLUE 1

Multiplication facts (1-12)

The detective counts rows of pumpkin buckets left at the scene to decode the first clue.

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

T																T
21	64	11	40	42	60	60	22	42	144	49	132	11	25	144	132	21

88	25	11	22	120	132	54	36	60	132	88	49

$3 \times 7 = \square \rightarrow \boxed{\text{T}}$

$5 \times 5 = \square \rightarrow \boxed{\text{S}}$

$8 \times 5 = \square \rightarrow \boxed{\text{V}}$

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

$10 \times 12 = \square \rightarrow \boxed{\text{F}}$

$9 \times 6 = \square \rightarrow \boxed{\text{G}}$

$12 \times 5 = \square \rightarrow \boxed{\text{L}}$

$1 \times 11 = \square \rightarrow \boxed{\text{E}}$

$9 \times 4 = \square \rightarrow \boxed{\text{C}}$

$12 \times 11 = \square \rightarrow \boxed{\text{O}}$

$11 \times 2 = \square \rightarrow \boxed{\text{A}}$

$11 \times 8 = \square \rightarrow \boxed{\text{U}}$

$7 \times 6 = \square \rightarrow \boxed{\text{I}}$

$7 \times 7 = \square \rightarrow \boxed{\text{D}}$

$8 \times 8 = \square \rightarrow \boxed{\text{H}}$

Scratch space:

CLUE 2 Integers

The haunted temperature gauge goes up and down as the detective tracks floor changes in the tower.

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

T										T								
11	14	23	9	25	9	7	23	15	11	8	17	20	7	7	23	8	30	

										T						
24	13	20	4	23	21	20	17	13	23	21	11	14	30	28	8	9

$$(-8) + 19 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$(-7) + 37 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$(-1) + 9 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$(-8) + 12 = \boxed{} \rightarrow \boxed{\text{V}}$$

$$7 - (-13) = \boxed{} \rightarrow \boxed{\text{O}}$$

$$(-11) + 39 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$(-8) + 15 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$(-6) + 23 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$(-7) + 31 = \boxed{} \rightarrow \boxed{\text{G}}$$

$$(-15) + 29 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$(-9) + 30 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$(-9) + 18 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$1 - (-14) = \boxed{} \rightarrow \boxed{\text{C}}$$

$$(-5) + 28 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$11 - (-2) = \boxed{} \rightarrow \boxed{\text{L}}$$

$$(-1) + 26 = \boxed{} \rightarrow \boxed{\text{U}}$$

Scratch space:

CLUE 3

Percentages

The spooky candy shop clerk gives a percentage discount readout that reveals the next note.

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

T																
39	32	57	8	11	59	59	36	11	29	31	36	29	36	3	36	51

											T
20	31	23	17	36	28	31	11	16	32	39	

									T
20	59	36	35	32	59	11	16	32	39

$50\% \text{ of } 78 = \boxed{} \rightarrow \boxed{\text{T}}$

$5\% \text{ of } 460 = \boxed{} \rightarrow \boxed{\text{O}}$

$25\% \text{ of } 64 = \boxed{} \rightarrow \boxed{\text{G}}$

$10\% \text{ of } 350 = \boxed{} \rightarrow \boxed{\text{S}}$

$25\% \text{ of } 236 = \boxed{} \rightarrow \boxed{\text{L}}$

$25\% \text{ of } 116 = \boxed{} \rightarrow \boxed{\text{N}}$

$10\% \text{ of } 310 = \boxed{} \rightarrow \boxed{\text{R}}$

$10\% \text{ of } 30 = \boxed{} \rightarrow \boxed{\text{W}}$

$75\% \text{ of } 68 = \boxed{} \rightarrow \boxed{\text{Y}}$

$10\% \text{ of } 110 = \boxed{} \rightarrow \boxed{\text{I}}$

$20\% \text{ of } 140 = \boxed{} \rightarrow \boxed{\text{B}}$

$25\% \text{ of } 32 = \boxed{} \rightarrow \boxed{\text{V}}$

$5\% \text{ of } 400 = \boxed{} \rightarrow \boxed{\text{F}}$

$20\% \text{ of } 85 = \boxed{} \rightarrow \boxed{\text{M}}$

$50\% \text{ of } 114 = \boxed{} \rightarrow \boxed{\text{E}}$

$25\% \text{ of } 144 = \boxed{} \rightarrow \boxed{\text{A}}$

$10\% \text{ of } 320 = \boxed{} \rightarrow \boxed{\text{H}}$

Scratch space:

CLUE 4
Order of operations

To open the locked potion box, the detective must solve a multi step number puzzle.

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

A				A									A					
98	24	18	35	98	24	52	33	77	49	52	73	40	35	98	24	29		
	A																	
77	98	73	64	33	80	40	18	24	40	71	33	51	12	15	51	84	49	24

$88 + 5 \times 2 = \square \rightarrow \boxed{\text{A}}$

$6 \times 11 - 14 = \square \rightarrow \boxed{\text{G}}$

$12 \times 5 - 27 = \square \rightarrow \boxed{\text{E}}$

$4 + 4 \times 2 = \square \rightarrow \boxed{\text{U}}$

$4 + 5 \times 4 = \square \rightarrow \boxed{\text{N}}$

$12 + 3 \times 2 = \square \rightarrow \boxed{\text{O}}$

$10 \times 3 - 1 = \square \rightarrow \boxed{\text{D}}$

$12 \times 9 - 24 = \square \rightarrow \boxed{\text{K}}$

$7 \times 11 - 4 = \square \rightarrow \boxed{\text{S}}$

$4 \times 9 - 21 = \square \rightarrow \boxed{\text{M}}$

$7 \times 12 - 7 = \square \rightarrow \boxed{\text{W}}$

$17 + 9 \times 7 = \square \rightarrow \boxed{\text{F}}$

$12 \times 7 - 20 = \square \rightarrow \boxed{\text{L}}$

$8 \times 9 - 1 = \square \rightarrow \boxed{\text{H}}$

$33 + 6 \times 3 = \square \rightarrow \boxed{\text{P}}$

$25 + 8 \times 3 = \square \rightarrow \boxed{\text{I}}$

$20 + 5 \times 3 = \square \rightarrow \boxed{\text{R}}$

$8 \times 8 - 24 = \square \rightarrow \boxed{\text{T}}$

Scratch space:

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

Splitting the remaining glow sticks evenly among the search team reveals 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:

$33 \div 3 = \boxed{}$

$3 \div 3 = \boxed{}$

$90 \div 10 = \boxed{}$

$72 \div 6 = \boxed{}$

$20 \div 4 = \boxed{}$

$8 \div 4 = \boxed{}$

$12 \div 4 = \boxed{}$

$50 \div 5 = \boxed{}$

$14 \div 2 = \boxed{}$

$30 \div 5 = \boxed{}$

$28 \div 7 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain let out a ghostly shriek, then splashed bubbling potion.
2. The villain summoned a swarm of bats, then shined eerie glowing eyes.
3. The villain summoned a swarm of bats, then splashed bubbling potion.
4. The villain let out a ghostly shriek, then tossed sticky candy everywhere.
5. The villain blasted glowing pumpkins, then flew off on a haunted broom.
6. The villain trapped the path with spider webs, then tossed sticky candy everywhere.
7. The villain blasted glowing pumpkins, then created a thick fog cloud.
8. The villain blasted glowing pumpkins, then splashed bubbling potion.
9. The villain vanished into shadow, then tossed sticky candy everywhere.
10. The villain summoned a swarm of bats, then tossed sticky candy everywhere.
11. The villain let out a ghostly shriek, then flew off on a haunted broom.
12. The villain vanished into shadow, then flew off on a haunted broom.

Answer Key

The Harvest Festival Heist

Culprit: Manny Mummy

Pumpkin Blast · Potion Splash · Left Handed · Orange Wig · Flashlight

Trail: Start 21 → Clue 1 19 → Clue 2 13 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT USE A FOG CLOUD"

$3 \times 7 = 21$ (T) · $5 \times 5 = 25$ (S) · $8 \times 5 = 40$ (V) · $12 \times 12 = 144$ (N) · $10 \times 12 = 120$ (F) · $9 \times 6 = 54$ (G) · $12 \times 5 = 60$ (L) · $1 \times 11 = 11$ (E) · $9 \times 4 = 36$ (C) · $12 \times 11 = 132$ (O) · $11 \times 2 = 22$ (A) · $11 \times 8 = 88$ (U) · $7 \times 6 = 42$ (I) · $7 \times 7 = 49$ (D) · $8 \times 8 = 64$ (H)

Clue 2 (Integers): "THE SUSPECT DROPPED A GLOVE FOR LEFT HANDS"

$(-8) + 19 = 11$ (T) · $(-7) + 37 = 30$ (A) · $(-1) + 9 = 8$ (D) · $(-8) + 12 = 4$ (V) · $7 - (-13) = 20$ (O) · $(-11) + 39 = 28$ (N) · $(-8) + 15 = 7$ (P) · $(-6) + 23 = 17$ (R) · $(-7) + 31 = 24$ (G) · $(-15) + 29 = 14$ (H) · $(-9) + 30 = 21$ (F) · $(-9) + 18 = 9$ (S) · $1 - (-14) = 15$ (C) · $(-5) + 28 = 23$ (E) · $11 - (-2) = 13$ (L) · $(-1) + 26 = 25$ (U)

Clue 3 (Percentages): "THE VILLAIN RAN AWAY FROM A BRIGHT FLASHLIGHT"

50% of 78 = 39 (T) · 5% of 460 = 23 (O) · 25% of 64 = 16 (G) · 10% of 350 = 35 (S) · 25% of 236 = 59 (L) · 25% of 116 = 29 (N) · 10% of 310 = 31 (R) · 10% of 30 = 3 (W) · 75% of 68 = 51 (Y) · 10% of 110 = 11 (I) · 20% of 140 = 28 (B) · 25% of 32 = 8 (V) · 5% of 400 = 20 (F) · 20% of 85 = 17 (M) · 50% of 114 = 57 (E) · 25% of 144 = 36 (A) · 10% of 320 = 32 (H)

Clue 4 (Order of operations): "AN ORANGE WIG STRAND WAS LEFT ON THE PUMPKIN"

$88 + 5 \times 2 = 98$ (A) · $6 \times 11 - 14 = 52$ (G) · $12 \times 5 - 27 = 33$ (E) · $4 + 4 \times 2 = 12$ (U) · $4 + 5 \times 4 = 24$ (N) · $12 + 3 \times 2 = 18$ (O) · $10 \times 3 - 1 = 29$ (D) · $12 \times 9 - 24 = 84$ (K) · $7 \times 11 - 4 = 73$ (S) · $4 \times 9 - 21 = 15$ (M) · $7 \times 12 - 7 = 77$ (W) · $17 + 9 \times 7 = 80$ (F) · $12 \times 7 - 20 = 64$ (L) · $8 \times 9 - 1 = 71$ (H) · $33 + 6 \times 3 = 51$ (P) · $25 + 8 \times 3 = 49$ (I) · $20 + 5 \times 3 = 35$ (R) · $8 \times 8 - 24 = 40$ (T)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Manny Mummy

$33 \div 3 = 11$ · $3 \div 3 = 1$ · $90 \div 10 = 9$ · $72 \div 6 = 12$ · $20 \div 4 = 5$ · $8 \div 4 = 2$ · $12 \div 4 = 3$ · $50 \div 5 = 10$ · $14 \div 2 = 7$ · $30 \div 5 = 6$ · $28 \div 7 = 4$