



# Case of the Super Bad Superhero

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

Detective: \_\_\_\_\_ Date: \_\_\_\_\_

A villain hides among the heroes of Mathhattan and has kidnapped the Mayor. The police can't tell friend from phony - only a sharp math detective can. Solve each clue's math to decode it, cross suspects off the list, and name the one hero left standing.

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 Super Bad Superhero is** \_\_\_\_\_

## Possible suspects

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

NAME	MAIN POWER	EXTRA POWER	MASK	HAIR	WEAKNESS
Owl Man	Teleportation	Sonic Scream	Masked	Orange	Cookies
Zapman	Teleportation	Super Strength	Masked	Green	Sunlight
Splash	Energy Blasts	Flight	Masked	Green	Sunlight
Iron Vox	Invisibility	Poisonous Burps	Masked	Orange	Silver
Razor	Mind Control	Super Strength	Unmasked	Green	Silver
Mrs. Amazing	Energy Blasts	Shape Shifting	Masked	Orange	Sunlight
Thunder Hawk	Mind Control	Poisonous Burps	Unmasked	Green	Sunlight
Blinker	Invisibility	Flight	Masked	Green	Sunlight
Pizza Peter	Mind Control	Sonic Scream	Unmasked	Purple	Sunlight
Titanicus	Invisibility	Shape Shifting	Unmasked	Purple	Cookies
Captain Nucleus	Super Speed	Flight	Unmasked	Green	Silver
Nightgale	Teleportation	Shape Shifting	Masked	Purple	Cookies
Colossal Crush	Mind Control	Shape Shifting	Unmasked	Purple	Silver
Dare Girl	Energy Blasts	Shape Shifting	Masked	Purple	Silver
Major Fury	Teleportation	Flight	Unmasked	Purple	Cookies
Lion Man	Energy Blasts	Super Strength	Masked	Green	Silver
Blitzfire	Mind Control	Super Strength	Masked	Green	Sunlight
Mega Mage	Mind Control	Super Strength	Masked	Orange	Cookies
Typhoon	Energy Blasts	Poisonous Burps	Masked	Purple	Silver
Quasar	Energy Blasts	Poisonous Burps	Masked	Green	Sunlight
Lady Bug	Energy Blasts	Super Strength	Masked	Green	Sunlight



**CLUE 2** Addition

A witness left a message at the scene, locked behind more math. Work it out to hear what they saw.

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

<b>A</b>																			
321	702	740	786	512	364	875	875	441	364	362	647	441	786	875	786	505	364		

<b>A</b>										<b>A</b>			<b>A</b>							
321	512	786	740	505	364	441	647	702	321	875	448	321	875	430	364	618				

$138 + 183 = \square$	<b>A</b>	$267 + 380 = \square$	<b>O</b>	$345 + 167 = \square$	<b>N</b>
$528 + 347 = \square$	<b>S</b>	$194 + 236 = \square$	<b>K</b>	$230 + 510 = \square$	<b>I</b>
$359 + 259 = \square$	<b>D</b>	$494 + 292 = \square$	<b>T</b>	$328 + 177 = \square$	<b>H</b>
$203 + 159 = \square$	<b>P</b>	$137 + 311 = \square$	<b>M</b>	$474 + 228 = \square$	<b>W</b>
$142 + 299 = \square$	<b>R</b>	$173 + 191 = \square$	<b>E</b>		

Scratch space:

**CLUE 3**

**Subtraction**

Down at the docks, someone scared the villain off and scribbled how. Crack the numbers to find out.

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

<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
504	706	410	621	127	504	243	706	410	614	344	344	127	125	281	

<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text" value="T"/>	<input type="text"/>
697	504	614	243	867	410	697	621	504	127	243	529	706	504	344

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>				
621	890	344	243	286	697	873	127	125	243	529	706	504

$557 - 53 = \square$	<input type="text" value="T"/>	$694 - 284 = \square$	<input type="text" value="E"/>	$1084 - 378 = \square$	<input type="text" value="H"/>
$723 - 194 = \square$	<input type="text" value="G"/>	$527 - 241 = \square$	<input type="text" value="D"/>	$302 - 175 = \square$	<input type="text" value="N"/>
$379 - 136 = \square$	<input type="text" value="I"/>	$1135 - 268 = \square$	<input type="text" value="K"/>	$1054 - 357 = \square$	<input type="text" value="S"/>
$443 - 99 = \square$	<input type="text" value="O"/>	$655 - 374 = \square$	<input type="text" value="Y"/>	$1196 - 323 = \square$	<input type="text" value="U"/>
$357 - 232 = \square$	<input type="text" value="L"/>	$1032 - 142 = \square$	<input type="text" value="V"/>	$958 - 337 = \square$	<input type="text" value="A"/>
$617 - 3 = \square$	<input type="text" value="R"/>				

Scratch space:



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

You've almost got it. One last set of numbers will reveal exactly how the villain pulled it off.

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:**

$56 \div 7 = \square$

$6 \div 6 = \square$

$45 \div 9 = \square$

$36 \div 9 = \square$

$33 \div 11 = \square$

$30 \div 5 = \square$

$99 \div 11 = \square$

$14 \div 7 = \square$

$12 \div 1 = \square$

$77 \div 11 = \square$

$66 \div 6 = \square$

**Step 2 - cross out the sentence with each answer:**

1. The villain bends minds to make victims obey, then tears open locked doors with raw strength.
2. The villain fires crackling energy blasts, then shape-shifts into a familiar face.
3. The villain races through the streets at impossible speed, then lets out a poisonous burp to weaken them.
4. The villain races through the streets at impossible speed, then shape-shifts into a familiar face.
5. The villain fires crackling energy blasts, then lets out a poisonous burp to weaken them.
6. The villain teleports behind victims without warning, then unleashes a sonic scream.
7. The villain turns invisible to slip past everyone, then lets out a poisonous burp to weaken them.
8. The villain teleports behind victims without warning, then tears open locked doors with raw strength.
9. The villain races through the streets at impossible speed, then unleashes a sonic scream.
10. The villain fires crackling energy blasts, then tears open locked doors with raw strength.
11. The villain fires crackling energy blasts, then takes to the sky.
12. The villain turns invisible to slip past everyone, then takes to the sky.

# Answer Key

## Case of the Super Bad Superhero

### Culprit: Lady Bug

Energy Blasts · Super Strength · Masked · Green · Sunlight

Trail: Start 21 → Clue 1 17 → Clue 2 12 → Clue 3 5 → Clue 4 4 → Clue 5 1

#### Clue 1 (Rounding): "THE VILLAIN CANNOT FLY"

Round 2,404 to the nearest thousand = 2000 (T) · Round 618 to the nearest hundred = 600 (H) · Round 758 to the nearest hundred = 800 (F) · Round 44 to the nearest ten = 40 (Y) · Round 320 to the nearest hundred = 300 (V) · Round 467 to the nearest hundred = 500 (O) · Round 54 to the nearest ten = 50 (C) · Round 5,359 to the nearest thousand = 5000 (L) · Round 7,182 to the nearest thousand = 7000 (E) · Round 8,708 to the nearest thousand = 9000 (N) · Round 2,831 to the nearest thousand = 3000 (I) · Round 61 to the nearest ten = 60 (A)

#### Clue 2 (Addition): "A WITNESS REPORTS THE ANTIHERO WAS MASKED"

$138 + 183 = 321$  (A) ·  $267 + 380 = 647$  (O) ·  $345 + 167 = 512$  (N) ·  $528 + 347 = 875$  (S) ·  $194 + 236 = 430$  (K) ·  $230 + 510 = 740$  (I) ·  $359 + 259 = 618$  (D) ·  $494 + 292 = 786$  (T) ·  $328 + 177 = 505$  (H) ·  $203 + 159 = 362$  (P) ·  $137 + 311 = 448$  (M) ·  $474 + 228 = 702$  (W) ·  $142 + 299 = 441$  (R) ·  $173 + 191 = 364$  (E)

#### Clue 3 (Subtraction): "THE ANTIHERO ONLY STRIKES AT NIGHT TO AVOID SUNLIGHT"

$557 - 53 = 504$  (T) ·  $694 - 284 = 410$  (E) ·  $1084 - 378 = 706$  (H) ·  $723 - 194 = 529$  (G) ·  $527 - 241 = 286$  (D) ·  $302 - 175 = 127$  (N) ·  $379 - 136 = 243$  (I) ·  $1135 - 268 = 867$  (K) ·  $1054 - 357 = 697$  (S) ·  $443 - 99 = 344$  (O) ·  $655 - 374 = 281$  (Y) ·  $1196 - 323 = 873$  (U) ·  $357 - 232 = 125$  (L) ·  $1032 - 142 = 890$  (V) ·  $958 - 337 = 621$  (A) ·  $617 - 3 = 614$  (R)

#### Clue 4 (Multiplication facts (1-12)): "YOU FIND STRANDS OF GREEN HAIR WHERE THE MAYOR WAS TAKEN"

$5 \times 5 = 25$  (Y) ·  $6 \times 12 = 72$  (T) ·  $11 \times 5 = 55$  (O) ·  $12 \times 1 = 12$  (U) ·  $9 \times 9 = 81$  (S) ·  $6 \times 11 = 66$  (R) ·  $5 \times 4 = 20$  (K) ·  $11 \times 11 = 121$  (E) ·  $9 \times 11 = 99$  (I) ·  $5 \times 9 = 45$  (N) ·  $8 \times 8 = 64$  (F) ·  $10 \times 10 = 100$  (G) ·  $11 \times 8 = 88$  (H) ·  $5 \times 8 = 40$  (D) ·  $4 \times 11 = 44$  (A) ·  $8 \times 10 = 80$  (M) ·  $8 \times 4 = 32$  (W)

#### Clue 5 (Division facts (1-12)): surviving statement is box 10 → Lady Bug

$56 \div 7 = 8$  ·  $6 \div 6 = 1$  ·  $45 \div 9 = 5$  ·  $36 \div 9 = 4$  ·  $33 \div 11 = 3$  ·  $30 \div 5 = 6$  ·  $99 \div 11 = 9$  ·  $14 \div 7 = 2$  ·  $12 \div 1 = 12$  ·  $77 \div 11 = 7$  ·  $66 \div 6 = 11$