



# Case of the Super Bad Superhero

Grade 3 math · Rounding, Word problems, Addition, Subtraction, 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
Lady Bug	Super Speed	Sonic Scream	Masked	Orange	Cookies
Razor	Super Speed	Flight	Masked	Purple	Silver
Zapman	Invisibility	Shape Shifting	Masked	Purple	Silver
Starlight	Mind Control	Shape Shifting	Masked	Purple	Cookies
Colossal Crush	Energy Blasts	Sonic Scream	Unmasked	Purple	Silver
Quasar	Invisibility	Flight	Masked	Green	Sunlight
Typhoon	Invisibility	Shape Shifting	Masked	Orange	Silver
Thunder Hawk	Super Speed	Sonic Scream	Masked	Purple	Silver
Blitzfire	Mind Control	Sonic Scream	Unmasked	Orange	Sunlight
Owl Man	Mind Control	Poisonous Burps	Unmasked	Purple	Sunlight
Captain Nucleus	Super Speed	Sonic Scream	Unmasked	Orange	Cookies
Splash	Mind Control	Sonic Scream	Unmasked	Purple	Cookies
Iron Vox	Energy Blasts	Poisonous Burps	Masked	Purple	Sunlight
Mrs. Amazing	Super Speed	Poisonous Burps	Unmasked	Green	Sunlight
Dare Girl	Super Speed	Super Strength	Masked	Purple	Silver
Mega Mage	Mind Control	Super Strength	Unmasked	Green	Cookies
Nightgale	Invisibility	Shape Shifting	Masked	Orange	Sunlight
The Giggler	Energy Blasts	Shape Shifting	Masked	Purple	Silver
Lion Man	Super Speed	Flight	Unmasked	Purple	Silver
Major Fury	Teleportation	Sonic Scream	Unmasked	Green	Sunlight
Blinker	Invisibility	Poisonous Burps	Masked	Green	Silver

**CLUE 1** Rounding

A torn note flutters out of the Mayor's office - but the words are hidden behind a math code. Solve it to read the first clue.

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
T																			
6000	60	200	800	9000	5000	5000	4000	9000	50	40	4000	50	50	70	6000	300	5000	7000	

Round 6,206 to the nearest thousand  →

Round 56 to the nearest ten  →

Round 237 to the nearest hundred  →

Round 802 to the nearest hundred  →

Round 69 to the nearest ten  →

Round 7,352 to the nearest thousand  →

Round 36 to the nearest ten  →

Round 47 to the nearest ten  →

Round 4,309 to the nearest thousand  →

Round 5,434 to the nearest thousand  →

Round 300 to the nearest hundred  →

Round 9,276 to the nearest thousand  →

Scratch space:

**CLUE 2****Word problems**

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 the boxes to fill in the missing word.

A witness saw the villain was 

M						
55	52	70	60	36	22	

.

There were 65 masks. 10 were used up. How many masks are left?  → **M**

There were 58 capes. 6 were used up. How many capes are left?  → **A**

There are 6 hideouts with 6 masks in each. How many masks in all?  → **E**

There were 40 gadgets. 18 were used up. How many gadgets are left?  → **D**

There are 12 hideouts with 5 masks in each. How many masks in all?  → **K**

There were 79 gadgets. 9 were used up. How many gadgets are left?  → **S**

Scratch space:

**CLUE 3**

**Addition**

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.

<b>A</b>		<b>A</b>						<b>A</b>									
408	748	408	705	304	420	876	408	692	558	705	632	725	725	720	528	558	

<b>A</b>																	
408	834	720	369	528	558	692	632	240	369	720	528	420	369	748	866	558	692

$140 + 268 = \square \rightarrow \mathbf{A}$

$347 + 373 = \square \rightarrow \mathbf{T}$

$361 + 387 = \square \rightarrow \mathbf{L}$

$294 + 234 = \square \rightarrow \mathbf{H}$

$73 + 167 = \square \rightarrow \mathbf{W}$

$601 + 275 = \square \rightarrow \mathbf{C}$

$344 + 348 = \square \rightarrow \mathbf{R}$

$306 + 560 = \square \rightarrow \mathbf{V}$

$135 + 234 = \square \rightarrow \mathbf{I}$

$401 + 231 = \square \rightarrow \mathbf{O}$

$379 + 326 = \square \rightarrow \mathbf{D}$

$165 + 255 = \square \rightarrow \mathbf{S}$

$122 + 182 = \square \rightarrow \mathbf{Y}$

$300 + 425 = \square \rightarrow \mathbf{F}$

$443 + 391 = \square \rightarrow \mathbf{N}$

$215 + 343 = \square \rightarrow \mathbf{E}$

Scratch space:

**CLUE 4** Subtraction

The clean-up crew found something the villain dropped. Do the math to see what it was.

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

<b>Y</b>																	
135	217	364	121	377	126	597	585	650	421	207	126	597	585	217	121		
643	364	421	643	149	816	734	207	377	421	517	734	816	421	816	650	734	816
		<b>Y</b>															
736	207	135	217	421	517	207	585	650	207	256	816	126					

$478 - 343 = \square \rightarrow$ <b>Y</b>	$269 - 143 = \square \rightarrow$ <b>N</b>	$723 - 206 = \square \rightarrow$ <b>W</b>
$948 - 298 = \square \rightarrow$ <b>T</b>	$833 - 248 = \square \rightarrow$ <b>S</b>	$321 - 104 = \square \rightarrow$ <b>O</b>
$455 - 91 = \square \rightarrow$ <b>U</b>	$787 - 51 = \square \rightarrow$ <b>M</b>	$842 - 245 = \square \rightarrow$ <b>D</b>
$911 - 177 = \square \rightarrow$ <b>H</b>	$209 - 2 = \square \rightarrow$ <b>A</b>	$1035 - 219 = \square \rightarrow$ <b>E</b>
$242 - 93 = \square \rightarrow$ <b>L</b>	$390 - 269 = \square \rightarrow$ <b>F</b>	$893 - 250 = \square \rightarrow$ <b>P</b>
$698 - 321 = \square \rightarrow$ <b>I</b>	$600 - 179 = \square \rightarrow$ <b>R</b>	$444 - 188 = \square \rightarrow$ <b>K</b>

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:**

$20 \div 2 = \square$

$14 \div 7 = \square$

$90 \div 10 = \square$

$36 \div 3 = \square$

$48 \div 8 = \square$

$22 \div 2 = \square$

$50 \div 10 = \square$

$8 \div 8 = \square$

$32 \div 4 = \square$

$6 \div 2 = \square$

$44 \div 11 = \square$

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

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

# Answer Key

## Case of the Super Bad Superhero

### Culprit: Thunder Hawk

Super Speed · Sonic Scream · Masked · Purple · Silver

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

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

Round 6,206 to the nearest thousand = 6000 (T) · Round 56 to the nearest ten = 60 (H) · Round 237 to the nearest hundred = 200 (E) · Round 802 to the nearest hundred = 800 (V) · Round 69 to the nearest ten = 70 (O) · Round 7,352 to the nearest thousand = 7000 (Y) · Round 36 to the nearest ten = 40 (C) · Round 47 to the nearest ten = 50 (N) · Round 4,309 to the nearest thousand = 4000 (A) · Round 5,434 to the nearest thousand = 5000 (L) · Round 300 to the nearest hundred = 300 (F) · Round 9,276 to the nearest thousand = 9000 (I)

#### Clue 2 (Word problems): "MASKED"

There were 65 masks. 10 were used up. How many masks are left? = 55 (M) · There were 58 capes. 6 were used up. How many capes are left? = 52 (A) · There are 6 hideouts with 6 masks in each. How many masks in all? = 36 (E) · There were 40 gadgets. 18 were used up. How many gadgets are left? = 22 (D) · There are 12 hideouts with 5 masks in each. How many masks in all? = 60 (K) · There were 79 gadgets. 9 were used up. How many gadgets are left? = 70 (S)

#### Clue 3 (Addition): "A LADY SCARED OFF THE ANTIHERO WITH SILVER"

$140 + 268 = 408$  (A) ·  $347 + 373 = 720$  (T) ·  $361 + 387 = 748$  (L) ·  $294 + 234 = 528$  (H) ·  $73 + 167 = 240$  (W) ·  $601 + 275 = 876$  (C) ·  $344 + 348 = 692$  (R) ·  $306 + 560 = 866$  (V) ·  $135 + 234 = 369$  (I) ·  $401 + 231 = 632$  (O) ·  $379 + 326 = 705$  (D) ·  $165 + 255 = 420$  (S) ·  $122 + 182 = 304$  (Y) ·  $300 + 425 = 725$  (F) ·  $443 + 391 = 834$  (N) ·  $215 + 343 = 558$  (E)

#### Clue 4 (Subtraction): "YOU FIND STRANDS OF PURPLE HAIR WHERE THE MAYOR WAS TAKEN"

$478 - 343 = 135$  (Y) ·  $269 - 143 = 126$  (N) ·  $723 - 206 = 517$  (W) ·  $948 - 298 = 650$  (T) ·  $833 - 248 = 585$  (S) ·  $321 - 104 = 217$  (O) ·  $455 - 91 = 364$  (U) ·  $787 - 51 = 736$  (M) ·  $842 - 245 = 597$  (D) ·  $911 - 177 = 734$  (H) ·  $209 - 2 = 207$  (A) ·  $1035 - 219 = 816$  (E) ·  $242 - 93 = 149$  (L) ·  $390 - 269 = 121$  (F) ·  $893 - 250 = 643$  (P) ·  $698 - 321 = 377$  (I) ·  $600 - 179 = 421$  (R) ·  $444 - 188 = 256$  (K)

#### Clue 5 (Division facts (1-12)): surviving statement is box 7 → Thunder Hawk

$20 \div 2 = 10$  ·  $14 \div 7 = 2$  ·  $90 \div 10 = 9$  ·  $36 \div 3 = 12$  ·  $48 \div 8 = 6$  ·  $22 \div 2 = 11$  ·  $50 \div 10 = 5$  ·  $8 \div 8 = 1$  ·  $32 \div 4 = 8$  ·  $6 \div 2 = 3$  ·  $44 \div 11 = 4$