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

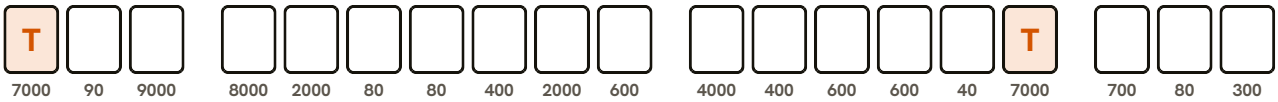
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	MAIN POWER	EXTRA POWER	SEX	HAIR	WEAKNESS
Blitzfire	Invisibility	Poisonous Burps	Female	Green	Sunlight
Lion Man	Teleportation	Shape Shifting	Male	Purple	Silver
Splash	Mind Control	Super Strength	Female	Orange	Silver
Razor	Energy Blasts	Shape Shifting	Female	Orange	Silver
Doctor Bolt	Invisibility	Shape Shifting	Male	Orange	Silver
The Giggler	Super Speed	Flight	Female	Purple	Silver
Blinker	Mind Control	Flight	Male	Purple	Sunlight
Titanicus	Teleportation	Flight	Female	Orange	Silver
Mrs. Amazing	Energy Blasts	Flight	Female	Green	Cookies
Owl Man	Energy Blasts	Super Strength	Female	Orange	Silver
Pizza Peter	Energy Blasts	Shape Shifting	Male	Orange	Silver
Starlight	Super Speed	Flight	Male	Green	Cookies
Captain Nucleus	Invisibility	Sonic Scream	Female	Green	Silver
Dare Girl	Invisibility	Poisonous Burps	Female	Orange	Sunlight
Mega Mage	Energy Blasts	Super Strength	Female	Purple	Cookies
Zapman	Mind Control	Flight	Female	Orange	Sunlight
Quasar	Super Speed	Poisonous Burps	Female	Orange	Cookies
Iron Vox	Mind Control	Shape Shifting	Male	Orange	Silver
Typhoon	Energy Blasts	Flight	Male	Green	Silver
Major Fury	Energy Blasts	Sonic Scream	Female	Orange	Silver
Lady Bug	Super Speed	Flight	Male	Green	Sunlight

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.



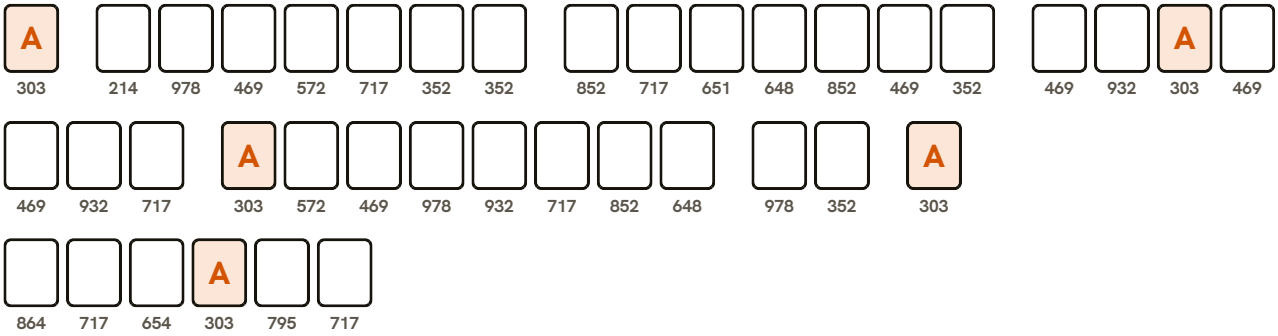
Round 6,631 to the nearest thousand		T	Round 8,917 to the nearest thousand		E	Round 733 to the nearest hundred		F
Round 300 to the nearest hundred		Y	Round 44 to the nearest ten		O	Round 564 to the nearest hundred		N
Round 8,092 to the nearest thousand		V	Round 4,278 to the nearest thousand		C	Round 84 to the nearest ten		L
Round 93 to the nearest ten		H	Round 2,313 to the nearest thousand		I	Round 414 to the nearest hundred		A

Scratch space:

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.



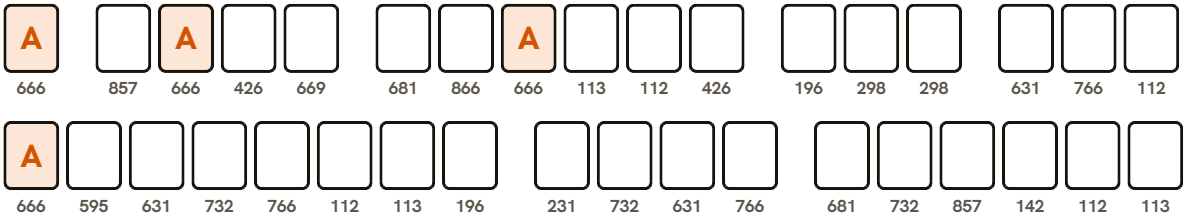
110 + 193 =		A	330 + 387 =		E	447 + 207 =		M
296 + 352 =		O	347 + 585 =		H	549 + 429 =		I
398 + 397 =		L	323 + 146 =		T	311 + 340 =		P
238 + 114 =		S	347 + 517 =		F	249 + 323 =		N
118 + 96 =		W	576 + 276 =		R			

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.



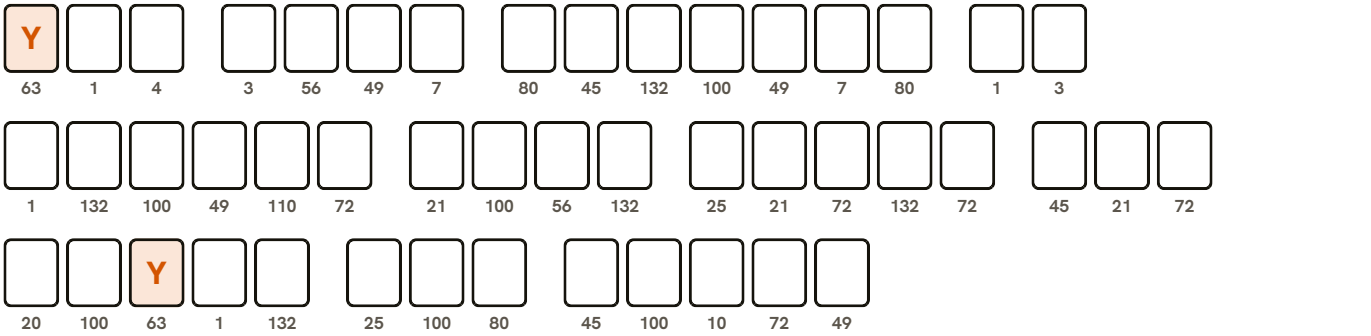
932 - 266 =		A	1115 - 383 =		I	571 - 145 =		D
366 - 135 =		W	256 - 144 =		E	1124 - 267 =		L
233 - 120 =		R	985 - 219 =		H	428 - 286 =		V
738 - 107 =		T	417 - 221 =		O	897 - 216 =		S
1008 - 142 =		C	346 - 48 =		F	906 - 237 =		Y
686 - 91 =		N						

Scratch space:

CLUE 4 Multiplication facts (1-12)

> 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.



9 × 7 =		Y	5 × 5 =		W	9 × 5 =		T
1 × 7 =		D	8 × 10 =		S	7 × 7 =		N
4 × 5 =		M	3 × 7 =		H	11 × 10 =		G
12 × 6 =		E	2 × 2 =		U	8 × 7 =		I
1 × 1 =		O	3 × 1 =		F	10 × 10 =		A
11 × 12 =		R	5 × 2 =		K			

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:

99 ÷ 9 = ☐	72 ÷ 12 = ☐	90 ÷ 10 = ☐
16 ÷ 4 = ☐	56 ÷ 8 = ☐	120 ÷ 12 = ☐
12 ÷ 1 = ☐	12 ÷ 6 = ☐	27 ÷ 9 = ☐
32 ÷ 4 = ☐	40 ÷ 8 = ☐	

Step 2 - cross out the sentence with each answer:

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

TEACHER / PARENT

Answer Key

Case of the Super Bad Superhero

Culprit: Major Fury

Energy Blasts · Sonic Scream · Female · Orange · Silver

Trail: Start 21 → Clue 1 13 → Clue 2 9 → Clue 3 5 → Clue 4 4 → Clue 5 1

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

Round 6,631 to the nearest thousand = 7000 (T) · Round 8,917 to the nearest thousand = 9000 (E) · Round 733 to the nearest hundred = 700 (F) · Round 300 to the nearest hundred = 300 (Y) · Round 44 to the nearest ten = 40 (O) · Round 564 to the nearest hundred = 600 (N) · Round 8,092 to the nearest thousand = 8000 (V) · Round 4,278 to the nearest thousand = 4000 (C) · Round 84 to the nearest ten = 80 (L) · Round 93 to the nearest ten = 90 (H) · Round 2,313 to the nearest thousand = 2000 (I) · Round 414 to the nearest hundred = 400 (A)

Clue 2 (Addition): "A WITNESS REPORTS THAT THE ANTIHERO IS A FEMALE"

110 + 193 = 303 (A) · 330 + 387 = 717 (E) · 447 + 207 = 654 (M) · 296 + 352 = 648 (O) · 347 + 585 = 932 (H) · 549 + 429 = 978 (I) · 398 + 397 = 795 (L) · 323 + 146 = 469 (T) · 311 + 340 = 651 (P) · 238 + 114 = 352 (S) · 347 + 517 = 864 (F) · 249 + 323 = 572 (N) · 118 + 96 = 214 (W) · 576 + 276 = 852 (R)

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

932 - 266 = 666 (A) · 1115 - 383 = 732 (I) · 571 - 145 = 426 (D) · 366 - 135 = 231 (W) · 256 - 144 = 112 (E) · 1124 - 267 = 857 (L) · 233 - 120 = 113 (R) · 985 - 219 = 766 (H) · 428 - 286 = 142 (V) · 738 - 107 = 631 (T) · 417 - 221 = 196 (O) · 897 - 216 = 681 (S) · 1008 - 142 = 866 (C) · 346 - 48 = 298 (F) · 906 - 237 = 669 (Y) · 686 - 91 = 595 (N)

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

9 × 7 = 63 (Y) · 5 × 5 = 25 (W) · 9 × 5 = 45 (T) · 1 × 7 = 7 (D) · 8 × 10 = 80 (S) · 7 × 7 = 49 (N) · 4 × 5 = 20 (M) · 3 × 7 = 21 (H) · 11 × 10 = 110 (G) · 12 × 6 = 72 (E) · 2 × 2 = 4 (U) · 8 × 7 = 56 (I) · 1 × 1 = 1 (O) · 3 × 1 = 3 (F) · 10 × 10 = 100 (A) · 11 × 12 = 132 (R) · 5 × 2 = 10 (K)

Clue 5 (Division facts (1-12)): surviving statement is box 1 → Major Fury

99 ÷ 9 = 11 · 72 ÷ 12 = 6 · 90 ÷ 10 = 9 · 16 ÷ 4 = 4 · 56 ÷ 8 = 7 · 120 ÷ 12 = 10 · 12 ÷ 1 = 12 · 12 ÷ 6 = 2 · 27 ÷ 9 = 3 · 32 ÷ 4 = 8 · 40 ÷ 8 = 5