



Case of the Super Bad Superhero

Grade 2 math · Place value, Addition, Subtraction, Skip counting, Missing addends · Reading level grades 1-2

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
Doctor Bolt	Energy Blasts	Shape Shifting	Female	Purple	Sunlight
Quasar	Energy Blasts	Poisonous Burps	Female	Green	Sunlight
Blitzfire	Mind Control	Shape Shifting	Male	Green	Sunlight
Mega Mage	Mind Control	Super Strength	Female	Orange	Cookies
Mrs. Amazing	Energy Blasts	Super Strength	Male	Purple	Silver
Razor	Teleportation	Super Strength	Female	Green	Sunlight
Nightgale	Invisibility	Sonic Scream	Male	Orange	Silver
Iron Vox	Invisibility	Shape Shifting	Female	Green	Sunlight
Titanicus	Teleportation	Shape Shifting	Female	Green	Sunlight
Dare Girl	Super Speed	Shape Shifting	Female	Purple	Silver
Thunder Hawk	Super Speed	Shape Shifting	Male	Green	Silver
Starlight	Energy Blasts	Flight	Female	Green	Sunlight
The Giggler	Energy Blasts	Poisonous Burps	Male	Purple	Cookies
Major Fury	Invisibility	Super Strength	Female	Green	Silver
Colossal Crush	Super Speed	Sonic Scream	Female	Purple	Cookies
Pizza Peter	Invisibility	Flight	Male	Purple	Sunlight
Splash	Invisibility	Poisonous Burps	Female	Orange	Sunlight
Blinker	Energy Blasts	Super Strength	Male	Orange	Sunlight
Captain Nucleus	Super Speed	Flight	Female	Orange	Sunlight
Owl Man	Mind Control	Flight	Male	Purple	Silver
Typhoon	Super Speed	Shape Shifting	Male	Orange	Cookies

CLUE 1

Place value (tens & ones)

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="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"/>	<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"/>
78	45	25	58	32	34	34	29	32	97	95	29	97	97	91	78	75	34	67

- | | | | | | | | | |
|------------------------------------|----------------------|--------------------------------|------------------------------------|----------------------|--------------------------------|------------------------------------|----------------------|--------------------------------|
| What number has 7 tens and 8 ones? | <input type="text"/> | <input type="text" value="T"/> | What number has 9 tens and 5 ones? | <input type="text"/> | <input type="text" value="C"/> | What number has 5 tens and 8 ones? | <input type="text"/> | <input type="text" value="V"/> |
| What number has 3 tens and 2 ones? | <input type="text"/> | <input type="text" value="I"/> | What number has 7 tens and 5 ones? | <input type="text"/> | <input type="text" value="F"/> | What number has 2 tens and 9 ones? | <input type="text"/> | <input type="text" value="A"/> |
| What number has 3 tens and 4 ones? | <input type="text"/> | <input type="text" value="L"/> | What number has 2 tens and 5 ones? | <input type="text"/> | <input type="text" value="E"/> | What number has 9 tens and 1 one? | <input type="text"/> | <input type="text" value="O"/> |
| What number has 9 tens and 7 ones? | <input type="text"/> | <input type="text" value="N"/> | What number has 6 tens and 7 ones? | <input type="text"/> | <input type="text" value="Y"/> | What number has 4 tens and 5 ones? | <input type="text"/> | <input type="text" value="H"/> |

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.

<input type="text" value="A"/>	<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"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="A"/>	<input type="text"/>	
50	32	49	82	71	65	54	54	33	65	69	48	33	82	54	82	77	50	82

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="A"/>	<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="A"/>	
82	77	65	50	71	82	49	77	65	33	48	49	54	50

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="A"/>	<input type="text"/>	<input type="text"/>
91	65	41	50	35	65

30 + 20 =	<input type="text"/>	<input type="text" value="A"/>	23 + 31 =	<input type="text"/>	<input type="text" value="S"/>	17 + 18 =	<input type="text"/>	<input type="text" value="L"/>
22 + 47 =	<input type="text"/>	<input type="text" value="P"/>	24 + 9 =	<input type="text"/>	<input type="text" value="R"/>	52 + 25 =	<input type="text"/>	<input type="text" value="H"/>
23 + 25 =	<input type="text"/>	<input type="text" value="O"/>	29 + 12 =	<input type="text"/>	<input type="text" value="M"/>	20 + 12 =	<input type="text"/>	<input type="text" value="W"/>
29 + 20 =	<input type="text"/>	<input type="text" value="I"/>	29 + 36 =	<input type="text"/>	<input type="text" value="E"/>	33 + 49 =	<input type="text"/>	<input type="text" value="T"/>
33 + 58 =	<input type="text"/>	<input type="text" value="F"/>	44 + 27 =	<input type="text"/>	<input type="text" value="N"/>			

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"/>
21	82	54	48	75	21	89	82	54	25	86	86	75	28	34	

<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"/>	
79	21	25	89	67	54	79	48	21	75	89	59	82	21	21	86

<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"/>
48	44	86	89	81	79	35	21

50 - 29 =	<input type="text"/>	<input type="text" value="T"/>	65 - 21 =	<input type="text"/>	<input type="text" value="V"/>	112 - 30 =	<input type="text"/>	<input type="text" value="H"/>
45 - 11 =	<input type="text"/>	<input type="text" value="Y"/>	115 - 36 =	<input type="text"/>	<input type="text" value="S"/>	66 - 18 =	<input type="text"/>	<input type="text" value="A"/>
48 - 13 =	<input type="text"/>	<input type="text" value="U"/>	115 - 26 =	<input type="text"/>	<input type="text" value="I"/>	74 - 7 =	<input type="text"/>	<input type="text" value="K"/>
118 - 32 =	<input type="text"/>	<input type="text" value="O"/>	73 - 19 =	<input type="text"/>	<input type="text" value="E"/>	112 - 31 =	<input type="text"/>	<input type="text" value="D"/>
41 - 16 =	<input type="text"/>	<input type="text" value="R"/>	73 - 14 =	<input type="text"/>	<input type="text" value="G"/>	89 - 14 =	<input type="text"/>	<input type="text" value="N"/>
31 - 3 =	<input type="text"/>	<input type="text" value="L"/>						

Scratch space:

CLUE 4

Skip counting

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.

<input type="text" value="Y"/>	<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"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
6	130	100	42	25	65	22	26	14	120	10	65	22	26	130	42			
<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"/>	<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"/>
21	120	12	12	65	110	10	25	120	27	110	12	120	12	14	110	12		
<input type="text"/>	<input type="text"/>	<input type="text" value="Y"/>	<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"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
90	10	6	130	120	27	10	26	14	10	39	12	65						

Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10	<input type="text"/>	<input type="text" value="Y"/>	Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150	<input type="text"/>	<input type="text" value="O"/>	Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48	<input type="text"/>	<input type="text" value="F"/>
Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120	<input type="text"/>	<input type="text" value="U"/>	Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30	<input type="text"/>	<input type="text" value="S"/>	Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140	<input type="text"/>	<input type="text" value="R"/>
Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14	<input type="text"/>	<input type="text" value="A"/>	Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18	<input type="text"/>	<input type="text" value="T"/>	Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110	<input type="text"/>	<input type="text" value="M"/>
Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33	<input type="text"/>	<input type="text" value="W"/>	Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35	<input type="text"/>	<input type="text" value="I"/>	Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45	<input type="text"/>	<input type="text" value="K"/>
Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26	<input type="text"/>	<input type="text" value="D"/>	Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27	<input type="text"/>	<input type="text" value="G"/>	Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75	<input type="text"/>	<input type="text" value="N"/>
Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130	<input type="text"/>	<input type="text" value="H"/>	Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18	<input type="text"/>	<input type="text" value="E"/>			

Scratch space:

CLUE 5**Missing addends - 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:

$7 + \underline{\quad} = 12$

$2 + \underline{\quad} = 9$

$8 + \underline{\quad} = 20$

$6 + \underline{\quad} = 7$

$8 + \underline{\quad} = 18$

$6 + \underline{\quad} = 12$

$2 + \underline{\quad} = 4$

$2 + \underline{\quad} = 6$

$7 + \underline{\quad} = 15$

$4 + \underline{\quad} = 13$

$3 + \underline{\quad} = 14$

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

Answer Key

Case of the Super Bad Superhero

Culprit: Titanicus

Teleportation · Shape Shifting · Female · Green · Sunlight

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value (tens & ones)): "THE VILLAIN CANNOT FLY"

What number has 7 tens and 8 ones? = 78 (T) · What number has 9 tens and 5 ones? = 95 (C) · What number has 5 tens and 8 ones? = 58 (V) · What number has 3 tens and 2 ones? = 32 (I) · What number has 7 tens and 5 ones? = 75 (F) · What number has 2 tens and 9 ones? = 29 (A) · What number has 3 tens and 4 ones? = 34 (L) · What number has 2 tens and 5 ones? = 25 (E) · What number has 9 tens and 1 one? = 91 (O) · What number has 9 tens and 7 ones? = 97 (N) · What number has 6 tens and 7 ones? = 67 (Y) · What number has 4 tens and 5 ones? = 45 (H)

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

$30 + 20 = 50$ (A) · $23 + 31 = 54$ (S) · $17 + 18 = 35$ (L) · $22 + 47 = 69$ (P) · $24 + 9 = 33$ (R) · $52 + 25 = 77$ (H) · $23 + 25 = 48$ (O) · $29 + 12 = 41$ (M) · $20 + 12 = 32$ (W) · $29 + 20 = 49$ (I) · $29 + 36 = 65$ (E) · $33 + 49 = 82$ (T) · $33 + 58 = 91$ (F) · $44 + 27 = 71$ (N)

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

$50 - 29 = 21$ (T) · $65 - 21 = 44$ (V) · $112 - 30 = 82$ (H) · $45 - 11 = 34$ (Y) · $115 - 36 = 79$ (S) · $66 - 18 = 48$ (A) · $48 - 13 = 35$ (U) · $115 - 26 = 89$ (I) · $74 - 7 = 67$ (K) · $118 - 32 = 86$ (O) · $73 - 19 = 54$ (E) · $112 - 31 = 81$ (D) · $41 - 16 = 25$ (R) · $73 - 14 = 59$ (G) · $89 - 14 = 75$ (N) · $31 - 3 = 28$ (L)

Clue 4 (Skip counting): "YOU FIND STRANDS OF GREEN HAIR WHERE THE MAYOR WAS TAKEN"

Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (Y) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (O) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (F) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (U) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 = 120 (R) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 = 14 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (M) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (W) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (I) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (K) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 = 21 (G) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 = 12 (E)

Clue 5 (Missing addends): surviving statement is box 3 → Titanicus

$7 + \underline{\quad} = 12 = 5$ · $2 + \underline{\quad} = 9 = 7$ · $8 + \underline{\quad} = 20 = 12$ · $6 + \underline{\quad} = 7 = 1$ · $8 + \underline{\quad} = 18 = 10$ · $6 + \underline{\quad} = 12 = 6$ · $2 + \underline{\quad} = 4 = 2$ · $2 + \underline{\quad} = 6 = 4$ · $7 + \underline{\quad} = 15 = 8$ · $4 + \underline{\quad} = 13 = 9$ · $3 + \underline{\quad} = 14 = 11$