The Great Hero Academy Vault Heist

Grade 5 math · Addition, Subtraction, Multiplication, Skip counting, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

A rogue villain snuck into the Apex Hero Academy vault and stole the Golden Hero License! Young heroes must search the training grounds and solve clues to uncover 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 rogue villain is _____

Possible suspects

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

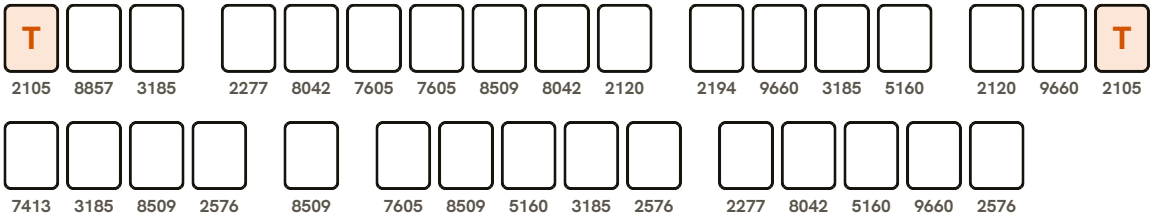
NAME	QUIRK ABILITY	SUPPORT GEAR	STANCE	HAIR STYLE	WEAKNESS
Mina Glide	Ice Shield	Capture Tape	Left Handed Stance	Sleek Black Hair	Cold Water
Yuto Magnet	Shadow Dash	Laser Visor	Left Handed Stance	Curly Green Hair	Bright Lights
Aoi Shift	Shadow Dash	Shock Gloves	Left Handed Stance	Sleek Black Hair	Cold Water
Nora Voltage	Gravity Lift	Power Gauntlets	Left Handed Stance	Spiky Red Hair	Cold Water
Leo Impact	Ice Shield	Shock Gloves	Right Handed Stance	Curly Green Hair	Loud Whistles
Hana Echo	Shadow Dash	Power Gauntlets	Right Handed Stance	Sleek Black Hair	Loud Whistles
Hiro Tempest	Sonic Scream	Laser Visor	Left Handed Stance	Spiky Red Hair	Loud Whistles
Shin Pulse	Sonic Scream	Capture Tape	Left Handed Stance	Sleek Black Hair	Bright Lights
Emi Dash	Fire Blast	Shock Gloves	Right Handed Stance	Sleek Black Hair	Cold Water
Kira Nova	Sonic Scream	Laser Visor	Left Handed Stance	Sleek Black Hair	Cold Water
Rei Phantom	Gravity Lift	Jet Boots	Right Handed Stance	Spiky Red Hair	Bright Lights
Kenji Stone	Sonic Scream	Power Gauntlets	Left Handed Stance	Sleek Black Hair	Cold Water
Ryu Blaze	Sonic Scream	Laser Visor	Right Handed Stance	Curly Green Hair	Bright Lights
Sora Gale	Sonic Scream	Jet Boots	Left Handed Stance	Sleek Black Hair	Bright Lights
Tori Surge	Shadow Dash	Shock Gloves	Left Handed Stance	Curly Green Hair	Cold Water
Jin Comet	Ice Shield	Power Gauntlets	Left Handed Stance	Sleek Black Hair	Cold Water
Saki Twister	Ice Shield	Shock Gloves	Left Handed Stance	Curly Green Hair	Loud Whistles
Kaito Sparks	Fire Blast	Laser Visor	Right Handed Stance	Spiky Red Hair	Loud Whistles
Daisuke Flare	Fire Blast	Power Gauntlets	Right Handed Stance	Sleek Black Hair	Cold Water
Yuki Frost	Fire Blast	Jet Boots	Right Handed Stance	Curly Green Hair	Loud Whistles
Ren Blast	Gravity Lift	Laser Visor	Right Handed Stance	Spiky Red Hair	Loud Whistles

make your own at mathcrackers.com

CLUE 1 Addition

> Guard Bot seven added up all hero badges collected in class to rule out bad equipment.

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



1066 + 1039 = ☐ → T	5019 + 4641 = ☐ → O	4921 + 2492 = ☐ → W
2232 + 2928 = ☐ → S	4750 + 2855 = ☐ → L	1300 + 1885 = ☐ → E
656 + 1464 = ☐ → N	5170 + 3339 = ☐ → A	4809 + 4048 = ☐ → H
1435 + 759 = ☐ → D	1070 + 1207 = ☐ → V	5156 + 2886 = ☐ → I
1133 + 1443 = ☐ → R		

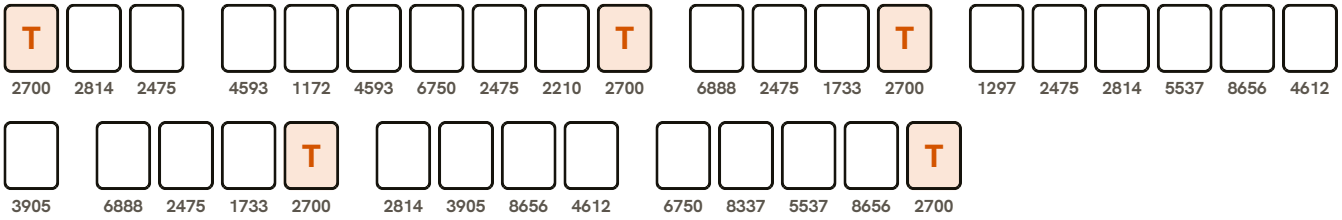
Scratch space:

CLUE 2

Subtraction

Class one A subtracted broken training dummies from the courtyard inventory to trace a path.

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



6389 - 3689 = ☐ → T

6542 - 1930 = ☐ → D

10933 - 2596 = ☐ → R

4284 - 3112 = ☐ → U

8392 - 3799 = ☐ → S

6666 - 1129 = ☐ → I

6966 - 78 = ☐ → L

1905 - 608 = ☐ → B

3020 - 810 = ☐ → C

5921 - 3446 = ☐ → E

11766 - 3110 = ☐ → N

3708 - 1975 = ☐ → F

7351 - 4537 = ☐ → H

8696 - 4791 = ☐ → A

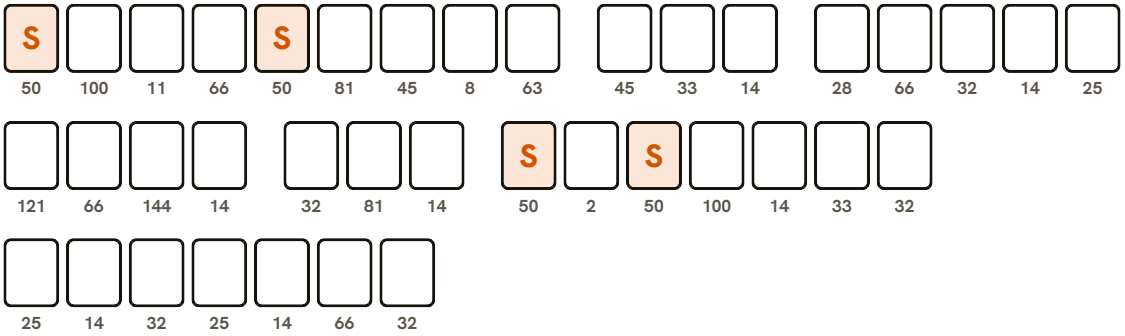
6863 - 113 = ☐ → P

Scratch space:

CLUE 3 Multiplication facts (1-12)

> The hero instructor multiplied rows of hero lockers to inspect evidence carefully.

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



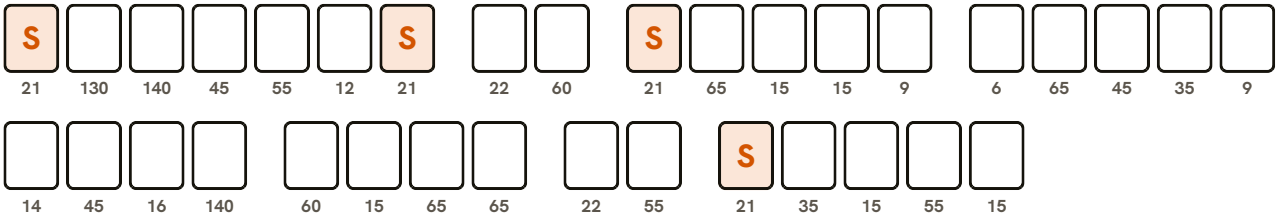
5 × 10 = ☐ → S	10 × 10 = ☐ → P	11 × 6 = ☐ → A
11 × 11 = ☐ → M	4 × 8 = ☐ → T	7 × 2 = ☐ → E
9 × 9 = ☐ → H	7 × 4 = ☐ → W	7 × 9 = ☐ → G
3 × 11 = ☐ → C		
1 × 11 = ☐ → L	12 × 12 = ☐ → D	1 × 2 = ☐ → U
2 × 4 = ☐ → N	5 × 9 = ☐ → I	5 × 5 = ☐ → R

Scratch space:

CLUE 4 Skip counting

Security drones skip counted hero energy meters along the perimeter to find a witness.

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



Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, ___, 24, 27 ☐ → **S**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, ___, 14, 16 ☐ → **D**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, ___, 18, 21 ☐ → **E**

Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 ☐ → **B**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 ☐ → **A**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, ___, 16, 18 ☐ → **H**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, ___, 70, 75 ☐ → **L**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, ___, 140, 150 ☐ → **T**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 ☐ → **R**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, ___, 60, 65 ☐ → **N**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, ___, 65, 70 ☐ → **F**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, ___, 18, 20 ☐ → **I**

Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 ☐ → **K**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, ___, 24, 26 ☐ → O

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, ___, 40, 45 ☐ → C

Scratch space:

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

> Principal Gearhead divided training snacks equally among squads while taking statements.

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:

14 ÷ 2 = ☐	72 ÷ 8 = ☐	3 ÷ 1 = ☐	121 ÷ 11 = ☐	50 ÷ 10 = ☐
4 ÷ 4 = ☐	6 ÷ 3 = ☐	96 ÷ 12 = ☐	18 ÷ 3 = ☐	10 ÷ 1 = ☐
8 ÷ 2 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain lifted the heavy vault with gravity, then smashed the door open with power gauntlets.
2. The villain lifted the heavy vault with gravity, then zapped the keypads with shock gloves.
3. The villain dashed through the shadows unseen, then zapped the keypads with shock gloves.
4. The villain froze the lock solid with an ice shield, then zoomed away using jet boots.
5. The villain dashed through the shadows unseen, then smashed the door open with power gauntlets.
6. The villain shattered the security glass with sonic screams, then zapped the keypads with shock gloves.
7. The villain shattered the security glass with sonic screams, then smashed the door open with power gauntlets.
8. The villain blasted fire through the door, then zapped the keypads with shock gloves.
9. The villain froze the lock solid with an ice shield, then wrapped up the guards in capture tape.
10. The villain blasted fire through the door, then melted the hinges with a laser visor.
11. The villain shattered the security glass with sonic screams, then zoomed away using jet boots.
12. The villain froze the lock solid with an ice shield, then smashed the door open with power gauntlets.

TEACHER / PARENT

Answer Key

The Great Hero Academy Vault Heist

Culprit: Jin Comet

Ice Shield · Power Gauntlets · Left Handed Stance · Sleek Black Hair · Cold Water

Trail: Start 21 → Clue 1 15 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT WEAR A LASER VISOR"

1066 + 1039 = 2105 (T) · 5019 + 4641 = 9660 (O) · 4921 + 2492 = 7413 (W) · 2232 + 2928 = 5160 (S) · 4750 + 2855 = 7605 (L) · 1300 + 1885 = 3185 (E) · 656 + 1464 = 2120 (N) · 5170 + 3339 = 8509 (A) · 4809 + 4048 = 8857 (H) · 1435 + 759 = 2194 (D) · 1070 + 1207 = 2277 (V) · 5156 + 2886 = 8042 (I) · 1133 + 1443 = 2576 (R)

Clue 2 (Subtraction): "THE SUSPECT LEFT BEHIND A LEFT HAND PRINT"

6389 - 3689 = 2700 (T) · 6542 - 1930 = 4612 (D) · 10933 - 2596 = 8337 (R) · 4284 - 3112 = 1172 (U) · 8392 - 3799 = 4593 (S) · 6666 - 1129 = 5537 (I) · 6966 - 78 = 6888 (L) · 1905 - 608 = 1297 (B) · 3020 - 810 = 2210 (C) · 5921 - 3446 = 2475 (E) · 11766 - 3110 = 8656 (N) · 3708 - 1975 = 1733 (F) · 7351 - 4537 = 2814 (H) · 8696 - 4791 = 3905 (A) · 6863 - 113 = 6750 (P)

Clue 3 (Multiplication facts (1-12)): "SPLASHING ICE WATER MADE THE SUSPECT RETREAT"

5 × 10 = 50 (S) · 10 × 10 = 100 (P) · 11 × 6 = 66 (A) · 11 × 11 = 121 (M) · 4 × 8 = 32 (T) · 7 × 2 = 14 (E) · 9 × 9 = 81 (H) · 7 × 4 = 28 (W) · 7 × 9 = 63 (G) · 3 × 11 = 33 (C) · 1 × 11 = 11 (L) · 12 × 12 = 144 (D) · 1 × 2 = 2 (U) · 2 × 4 = 8 (N) · 5 × 9 = 45 (I) · 5 × 5 = 25 (R)

Clue 4 (Skip counting): "STRANDS OF SLEEK BLACK HAIR FELL ON SCENE"

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, ___, 24, 27 = 21 (S) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, ___, 14, 16 = 12 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, ___, 18, 21 = 15 (E) · Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 = 6 (B) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 = 45 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, ___, 16, 18 = 14 (H) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, ___, 70, 75 = 65 (L) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, ___, 140, 150 = 130 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 = 140 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, ___, 60, 65 = 55 (N) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, ___, 65, 70 = 60 (F) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, ___, 18, 20 = 16 (I) · Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 = 9 (K) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, ___, 24, 26 = 22 (O) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, ___, 40, 45 = 35 (C)

Clue 5 (Division facts (1-12)): surviving statement is box 12 → Jin Comet

14 ÷ 2 = 7 · 72 ÷ 8 = 9 · 3 ÷ 1 = 3 · 121 ÷ 11 = 11 · 50 ÷ 10 = 5 · 4 ÷ 4 = 1 · 6 ÷ 3 = 2 · 96 ÷ 12 = 8 · 18 ÷ 3 = 6 · 10 ÷ 1 = 10 · 8 ÷ 2 = 4