



The Backstage Beatdown

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

Detective: _____ **Date:** _____

A sneaky shadow demon took the golden microphone right before the big show! The music cannot start without it. Our demon hunter squad must scan the backstage area and find out which idol is really the monster in disguise.

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 shadow demon is _____

Possible suspects

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

NAME	SIGNATURE MOVE	STAGE GEAR	STAGE HABIT	HAIR COLOR	MUSIC WEAKNESS
Lisa	laser wink	neon mic	holds mic right	bright green	cute songs
Taemin	bass drop	star ring	holds mic right	bright green	high notes
Hyunjin	high kick	led jacket	holds mic left	icy blue	drum beats
Jimin	vocal blast	led jacket	holds mic left	icy blue	high notes
Baekhyun	vocal blast	led jacket	holds mic right	bright green	high notes
Bang Chan	dance spin	neon mic	holds mic left	bright green	cute songs
Felix	vocal blast	star ring	holds mic left	bright green	cute songs
Jin	laser wink	neon mic	holds mic left	bright green	high notes
J-Hope	laser wink	led jacket	holds mic left	bright green	cute songs
Momo	dance spin	neon mic	holds mic left	bright green	drum beats
RM	high kick	star ring	holds mic right	neon pink	drum beats
V	bass drop	neon mic	holds mic left	bright green	drum beats
Ryujin	laser wink	glow wand	holds mic left	icy blue	cute songs
Sana	bass drop	led jacket	holds mic left	neon pink	cute songs
Yeji	vocal blast	glow wand	holds mic left	neon pink	drum beats
Winter	dance spin	silver boots	holds mic left	icy blue	cute songs
Kai	high kick	led jacket	holds mic left	neon pink	cute songs
Tzuyu	dance spin	silver boots	holds mic left	bright green	drum beats
Jennie	high kick	silver boots	holds mic left	bright green	cute songs
Jisoo	dance spin	led jacket	holds mic right	bright green	drum beats
Karina	bass drop	led jacket	holds mic left	bright green	cute songs

CLUE 1 Place value

We check the glowing digital scoreboard backstage. The tens and ones show us a hint about the demon's extra gear.

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

A number line from 0 to 100. The numbers 23, 61, 83, and 85 are marked. The number 23 is highlighted in orange and labeled with a 'T'.

What number has 2 tens and 3 ones? → T

What number has 8 tens and 6 ones? → **R**

What number has 7 tens and 5 ones? → **G**

What number has 9 tens and 1 one? → **A**

What number has 1 ten and 4 ones? → **N**

What number has 6 tens and 1 one? → **D**

What number has 9 tens and 6 ones? → **H**

What number has 6 tens and 6 ones? → **W**

What number has 1 ten and 6 ones? →

What number has 8 tens and 2 ones? → **S**

What number has 8 tens and 5 ones? → ☒

What number has 7 tens and 8 ones? → **M**

What number has 8 tens and 3 ones? → **E**

Scratch space:

CLUE 2

Let us count all the sparkly stage outfits in the closets. Adding them up gives us a clue about the demon's stage habit.

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

A 2x10 grid of boxes. The top row contains the following values from left to right: 46 (orange), 64, 41, 26, 66, 26, 75, 41, 36, 46 (orange), 64, 60, 67, 96, 26, 46 (orange), 64, 41. The bottom row contains the following values from left to right: 48, 72, 36, 72, 74, 46 (orange), 64, 41, 67, 41, 43, 46 (orange), 64, 45, 74, 96.

$$26 + 20 = \boxed{} \rightarrow \boxed{\text{T}}$$

$22 + 50 = \boxed{} \rightarrow \boxed{}$

$27 + 16 = \boxed{} \rightarrow \boxed{\text{F}}$

$$27 + 33 = \boxed{} \rightarrow \boxed{0}$$

$24 + 43 = \square \rightarrow \boxed{\text{L}}$

$62 + 34 = \boxed{} \rightarrow \boxed{\text{D}}$

$$51 + 24 = \boxed{} \rightarrow \mathbf{P}$$

$25 + 20 = \boxed{} \rightarrow \mathbf{A}$

$23 + 51 = \boxed{} \rightarrow \boxed{\text{N}}$

$29 + 12 = \boxed{} \rightarrow \boxed{\text{E}}$

$$20 + 28 = \boxed{} \rightarrow \boxed{\text{M}}$$

$29 + 37 = \boxed{} \rightarrow \boxed{\mathbf{U}}$

$7 + 19 = \boxed{} \rightarrow \boxed{\mathbf{S}}$

$35 + 29 = \boxed{} \rightarrow \boxed{\text{H}}$

$20 + 16 = \boxed{} \rightarrow \boxed{\text{C}}$

Scratch space:

CLUE 3

Subtraction

The band had lots of glow sticks but the demon broke some. Subtract the broken ones to find what music the demon hates.

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

A																	
53	21	14	32	38	33	55	81	14	41	28	43	72	66	26	76	76	
36	26	12	12	38	81	44	14	27	28	43	41	81	14	32			

$73 - 20 = \square \rightarrow \boxed{\text{A}}$

$57 - 24 = \square \rightarrow \boxed{\text{C}}$

$103 - 37 = \square \rightarrow \boxed{\text{W}}$

$39 - 11 = \square \rightarrow \boxed{\text{O}}$

$59 - 15 = \square \rightarrow \boxed{\text{H}}$

$30 - 4 = \square \rightarrow \boxed{\text{I}}$

$93 - 38 = \square \rightarrow \boxed{\text{U}}$

$43 - 7 = \square \rightarrow \boxed{\text{D}}$

$69 - 31 = \square \rightarrow \boxed{\text{Y}}$

$80 - 8 = \square \rightarrow \boxed{\text{G}}$

$83 - 7 = \square \rightarrow \boxed{\text{L}}$

$44 - 30 = \square \rightarrow \boxed{\text{E}}$

$70 - 29 = \square \rightarrow \boxed{\text{S}}$

$44 - 32 = \square \rightarrow \boxed{\text{Z}}$

$56 - 35 = \square \rightarrow \boxed{\text{V}}$

$60 - 28 = \square \rightarrow \boxed{\text{R}}$

$59 - 16 = \square \rightarrow \boxed{\text{N}}$

$47 - 20 = \square \rightarrow \boxed{\text{M}}$

$103 - 22 = \square \rightarrow \boxed{\text{T}}$

Scratch space:

CLUE 4 Skip counting

We follow the neon footprints down the dark hallway. We count them by twos to see where the demon dropped some hair.

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

B																	
9	36	22	21	90	25	21	36	39	39	18	70	25	36	140	18	16	70
40	39	36	39	28	39	100	25	120	18	25	90	39	70	25	140	21	39

Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 → **B**

Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 → **W**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 → **H**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 → **R**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 → **E**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 → **T**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 → **F**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 → **O**

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, __, 80, 90 → **S**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, __, 21, 24 → **N**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 → **L**

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

Scratch space:

CLUE 5**Missing addends - the last clue**

The backup dancers need matching shoes. We have some but need more. Finding the missing number tells us how the demon moves.

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:

$1 + \underline{\quad} = 11$

$6 + \underline{\quad} = 14$

$9 + \underline{\quad} = 18$

$8 + \underline{\quad} = 12$

$2 + \underline{\quad} = 3$

$1 + \underline{\quad} = 12$

$9 + \underline{\quad} = 11$

$10 + \underline{\quad} = 16$

$5 + \underline{\quad} = 10$

$10 + \underline{\quad} = 17$

$5 + \underline{\quad} = 8$

Step 2 - cross out the sentence with each answer:

1. The villain whirls in a fast dance spin, then stomps in shiny silver boots.
2. The villain leaps with a high kick, then spins a sparkling star ring.
3. The villain whirls in a fast dance spin, then lights up an led jacket.
4. The villain whirls in a fast dance spin, then spins a sparkling star ring.
5. The villain leaps with a high kick, then lights up an led jacket.
6. The villain leaps with a high kick, then waves a magic glow wand.
7. The villain flashes a laser wink, then waves a magic glow wand.
8. The villain flashes a laser wink, then lights up an led jacket.
9. The villain leaps with a high kick, then stomps in shiny silver boots.
10. The villain drops a heavy bass beat, then lights up an led jacket.
11. The villain drops a heavy bass beat, then swings a glowing neon mic.
12. The villain whirls in a fast dance spin, then swings a glowing neon mic.

Answer Key

The Backstage Beatdown

Culprit: Bang Chan

dance spin · neon mic · holds mic left · bright green · cute songs

Trail: Start 21 → Clue 1 18 → Clue 2 15 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE DEMON DOES NOT WEAR A STAR RING"

What number has 2 tens and 3 ones? = 23 (T) · What number has 8 tens and 6 ones? = 86 (R) · What number has 7 tens and 5 ones? = 75 (G) · What number has 9 tens and 1 one? = 91 (A) · What number has 1 ten and 4 ones? = 14 (N) · What number has 6 tens and 1 one? = 61 (D) · What number has 9 tens and 6 ones? = 96 (H) · What number has 6 tens and 6 ones? = 66 (W) · What number has 1 ten and 6 ones? = 16 (I) · What number has 8 tens and 2 ones? = 82 (S) · What number has 8 tens and 5 ones? = 85 (O) · What number has 7 tens and 8 ones? = 78 (M) · What number has 8 tens and 3 ones? = 83 (E)

Clue 2 (Addition): "THE SUSPECT HOLDS THE MIC IN THE LEFT HAND"

$26 + 20 = 46$ (T) · $22 + 50 = 72$ (I) · $27 + 16 = 43$ (F) · $27 + 33 = 60$ (O) · $24 + 43 = 67$ (L) · $62 + 34 = 96$ (D) · $51 + 24 = 75$ (P) · $25 + 20 = 45$ (A) · $23 + 51 = 74$ (N) · $29 + 12 = 41$ (E) · $20 + 28 = 48$ (M) · $29 + 37 = 66$ (U) · $7 + 19 = 26$ (S) · $35 + 29 = 64$ (H) · $20 + 16 = 36$ (C)

Clue 3 (Subtraction): "A VERY CUTE SONG WILL DIZZY THE MONSTER"

$73 - 20 = 53$ (A) · $57 - 24 = 33$ (C) · $103 - 37 = 66$ (W) · $39 - 11 = 28$ (O) · $59 - 15 = 44$ (H) · $30 - 4 = 26$ (I) · $93 - 38 = 55$ (U) · $43 - 7 = 36$ (D) · $69 - 31 = 38$ (Y) · $80 - 8 = 72$ (G) · $83 - 7 = 76$ (L) · $44 - 30 = 14$ (E) · $70 - 29 = 41$ (S) · $44 - 32 = 12$ (Z) · $56 - 35 = 21$ (V) · $60 - 28 = 32$ (R) · $59 - 16 = 43$ (N) · $47 - 20 = 27$ (M) · $103 - 22 = 81$ (T)

Clue 4 (Skip counting): "BRIGHT GREEN STRANDS WERE LEFT ON THE STAGE"

Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 = 9 (B) · Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 = 40 (W) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (H) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (R) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (F) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 = 120 (O) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (I) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, __, 80, 90 = 70 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, __, 21, 24 = 18 (N) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (L) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 = 21 (G)

Clue 5 (Missing addends): surviving statement is box 12 → Bang Chan

$1 + \underline{\quad} = 11 = 10$ · $6 + \underline{\quad} = 14 = 8$ · $9 + \underline{\quad} = 18 = 9$ · $8 + \underline{\quad} = 12 = 4$ · $2 + \underline{\quad} = 3 = 1$ · $1 + \underline{\quad} = 12 = 11$ · $9 + \underline{\quad} = 11 = 2$ · $10 + \underline{\quad} = 16 = 6$ · $5 + \underline{\quad} = 10 = 5$ · $10 + \underline{\quad} = 17 = 7$ · $5 + \underline{\quad} = 8 = 3$