



The Runaway Crown

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

Detective: _____ **Date:** _____

The Grand DJ's golden microphone is gone! Someone took it right off the neon throne. We must search the castle dance floor to find the Royal Rebel.

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 Royal Rebel is _____

Possible suspects

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

NAME	CROWN POWER	SECRET GEAR	DANCE MOVE	HAIR COLOR	SOFT SPOT
Roy	gold spark	neon scepter	spins right	gold hair	sweet candy
Prince	loud shout	silver cape	spins right	gold hair	loud music
Charlotte	royal glow	velvet robe	spins right	gold hair	sweet candy
George	star shimmer	silver cape	spins right	blue hair	bright lights
Harry	royal glow	neon scepter	spins right	gold hair	sweet candy
Max	royal glow	diamond ring	spins left	blue hair	sweet candy
Arthur	dance magic	diamond ring	spins left	pink hair	bright lights
Duke	royal glow	golden boots	spins left	gold hair	sweet candy
Duchess	star shimmer	diamond ring	spins left	gold hair	loud music
Kingsley	royal glow	velvet robe	spins left	gold hair	sweet candy
Charles	loud shout	golden boots	spins left	pink hair	sweet candy
Louis	star shimmer	golden boots	spins right	gold hair	sweet candy
Cleo	loud shout	velvet robe	spins left	gold hair	bright lights
Leo	gold spark	neon scepter	spins left	pink hair	sweet candy
Henry	dance magic	velvet robe	spins left	gold hair	loud music
Elizabeth	dance magic	golden boots	spins left	blue hair	bright lights
Regina	royal glow	neon scepter	spins left	blue hair	loud music
Baron	dance magic	diamond ring	spins right	gold hair	loud music
Countess	star shimmer	velvet robe	spins left	pink hair	bright lights
Victoria	star shimmer	diamond ring	spins right	blue hair	sweet candy
William	loud shout	silver cape	spins right	gold hair	sweet candy

CLUE 1

The castle guards count the shiny gems on the crown. Look at the tens and ones. This place value code helps us find the first clue!

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 are arranged in two rows. The first row contains: 49, 44, 80, 60, 80, 50, 80, 21, 55, 98, 80, 91, 47, 98, 49, 76, 80, 51, 60. The second row contains: 51, 77, 80, 21, 77, 80, 49, 60, 98, 50, 80. The number 49 is highlighted in orange in the 15th box of the first row and the 7th box of the second row.

What number has 4 tens and 9 ones? → **T**

What number has 6 tens and 0 ones? → **R**

What number has 8 tens and 0 ones? → **E**

What number has 4 tens and 4 ones? → **H**

What number has 7 tens and 7 ones? → **V**

What number has 5 tens and 5 ones?	→	D
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What number has 4 tens and 7 ones? → **N**

What number has 9 tens and 8 ones? → ☐

What number has 5 tens and 1 one? → **A**

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

What number has 7 tens and 6 ones? → **W**

What number has 2 tens and 1 one? → **L**

What number has 5 tens and 0 ones? → **B**

Scratch space:

CLUE 2 Addition

We find a list of golden cups. We must add the red cups and the blue cups together to get the total.

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

T																		T
92	65	57	26	57	85	57	36	21	73	79	60	21	26	79	43	65	92	

		T							
28	60	92	65	57	81	36	28	28	26

$41 + 51 = \boxed{} \rightarrow \boxed{\text{T}}$

$10 + 18 = \boxed{} \rightarrow \boxed{\text{O}}$

$24 + 36 = \boxed{} \rightarrow \boxed{\text{N}}$

$15 + 11 = \boxed{} \rightarrow \boxed{\text{R}}$

$21 + 15 = \boxed{} \rightarrow \boxed{\text{L}}$

$21 + 44 = \boxed{} \rightarrow \boxed{\text{H}}$

$29 + 50 = \boxed{} \rightarrow \boxed{\text{I}}$

$33 + 52 = \boxed{} \rightarrow \boxed{\text{B}}$

$34 + 23 = \boxed{} \rightarrow \boxed{\text{E}}$

$24 + 57 = \boxed{} \rightarrow \boxed{\text{F}}$

$19 + 24 = \boxed{} \rightarrow \boxed{\text{G}}$

$36 + 37 = \boxed{} \rightarrow \boxed{\text{P}}$

$9 + 12 = \boxed{} \rightarrow \boxed{\text{S}}$

Scratch space:

CLUE 3

Subtraction

Some sparkly rings are missing from the royal box. Take away the rings we found to see how many are left.

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

T																	T
41	74	17	57	17	33	17	38	38	85	82	17	24	24	46	17	17	41

15	48	16	83	77

$78 - 37 = \square \rightarrow \boxed{\text{T}}$

$43 - 19 = \square \rightarrow \boxed{\text{S}}$

$115 - 33 = \square \rightarrow \boxed{\text{V}}$

$119 - 36 = \square \rightarrow \boxed{\text{D}}$

$44 - 29 = \square \rightarrow \boxed{\text{C}}$

$41 - 25 = \square \rightarrow \boxed{\text{N}}$

$92 - 7 = \square \rightarrow \boxed{\text{O}}$

$62 - 29 = \square \rightarrow \boxed{\text{B}}$

$111 - 34 = \square \rightarrow \boxed{\text{Y}}$

$93 - 36 = \square \rightarrow \boxed{\text{R}}$

$73 - 25 = \square \rightarrow \boxed{\text{A}}$

$87 - 13 = \square \rightarrow \boxed{\text{H}}$

$69 - 23 = \square \rightarrow \boxed{\text{W}}$

$50 - 33 = \square \rightarrow \boxed{\text{E}}$

$77 - 39 = \square \rightarrow \boxed{\text{L}}$

Scratch space:

CLUE 4 Skip counting

The queens are jumping on the musical tiles. Count by twos to follow their steps across the floor!

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

W															
110	100	22	28	30	26	14	39	28	65	14	21	16	130	70	28 26
33	21	100	33	21	70	28	26	100							

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

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

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 → **T**

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

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

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

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

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 → **N**

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 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, __, 75, 80



Scratch space:

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

The DJs need ten speakers to play the song. We only have six. How many more do we need?

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:

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

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

$7 + \underline{\quad} = 14$

$10 + \underline{\quad} = 14$

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

$5 + \underline{\quad} = 16$

$1 + \underline{\quad} = 7$

$3 + \underline{\quad} = 5$

$10 + \underline{\quad} = 22$

$4 + \underline{\quad} = 12$

$2 + \underline{\quad} = 5$

Step 2 - cross out the sentence with each answer:

1. The villain uses royal glow to stun the crowd, then grabs the neon scepter.
2. The villain uses a gold spark to light the path, then grabs the diamond ring.
3. The villain uses royal glow to stun the crowd, then grabs the velvet robe.
4. The villain uses a gold spark to light the path, then grabs the silver cape.
5. The villain uses dance magic to slip away, then grabs the diamond ring.
6. The villain uses dance magic to slip away, then grabs the silver cape.
7. The villain uses a star shimmer to blind the guards, then grabs the golden boots.
8. The villain uses royal glow to stun the crowd, then grabs the golden boots.
9. The villain uses a gold spark to light the path, then grabs the neon scepter.
10. The villain uses a loud shout to clear the room, then grabs the silver cape.
11. The villain uses dance magic to slip away, then grabs the neon scepter.
12. The villain uses a star shimmer to blind the guards, then grabs the diamond ring.

Answer Key

The Runaway Crown

Culprit: William

loud shout · silver cape · spins right · gold hair · sweet candy

Trail: Start 21 → Clue 1 16 → Clue 2 8 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE REBEL DOES NOT WEAR A VELVET ROBE"

What number has 4 tens and 9 ones? = 49 (T) · What number has 6 tens and 0 ones? = 60 (R) · What number has 8 tens and 0 ones? = 80 (E) · What number has 4 tens and 4 ones? = 44 (H) · What number has 7 tens and 7 ones? = 77 (V) · What number has 5 tens and 5 ones? = 55 (D) · What number has 4 tens and 7 ones? = 47 (N) · What number has 9 tens and 8 ones? = 98 (O) · What number has 5 tens and 1 one? = 51 (A) · What number has 9 tens and 1 one? = 91 (S) · What number has 7 tens and 6 ones? = 76 (W) · What number has 2 tens and 1 one? = 21 (L) · What number has 5 tens and 0 ones? = 50 (B)

Clue 2 (Addition): "THE REBEL SPINS RIGHT ON THE FLOOR"

$41 + 51 = 92$ (T) · $10 + 18 = 28$ (O) · $24 + 36 = 60$ (N) · $15 + 11 = 26$ (R) · $21 + 15 = 36$ (L) · $21 + 44 = 65$ (H) · $29 + 50 = 79$ (I) · $33 + 52 = 85$ (B) · $34 + 23 = 57$ (E) · $24 + 57 = 81$ (F) · $19 + 24 = 43$ (G) · $36 + 37 = 73$ (P) · $9 + 12 = 21$ (S)

Clue 3 (Subtraction): "THE REBEL LOVES SWEET CANDY"

$78 - 37 = 41$ (T) · $43 - 19 = 24$ (S) · $115 - 33 = 82$ (V) · $119 - 36 = 83$ (D) · $44 - 29 = 15$ (C) · $41 - 25 = 16$ (N) · $92 - 7 = 85$ (O) · $62 - 29 = 33$ (B) · $111 - 34 = 77$ (Y) · $93 - 36 = 57$ (R) · $73 - 25 = 48$ (A) · $87 - 13 = 74$ (H) · $69 - 23 = 46$ (W) · $50 - 33 = 17$ (E) · $77 - 39 = 38$ (L)

Clue 4 (Skip counting): "WE FOUND GOLD HAIR ON THE THRONE"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (W) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 = 21 (H) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (I) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (T) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (O) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (G) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 = 14 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, __, 33, 36 = 30 (U) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (F) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (N) · 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 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, __, 75, 80 = 70 (R)

Clue 5 (Missing addends): surviving statement is box 10 → William

$6 + \underline{\quad} = 7 = 1$ · $4 + \underline{\quad} = 13 = 9$ · $7 + \underline{\quad} = 14 = 7$ · $10 + \underline{\quad} = 14 = 4$ · $5 + \underline{\quad} = 10 = 5$ · $5 + \underline{\quad} = 16 = 11$ · $1 + \underline{\quad} = 7 = 6$ · $3 + \underline{\quad} = 5 = 2$ · $10 + \underline{\quad} = 22 = 12$ · $4 + \underline{\quad} = 12 = 8$ · $2 + \underline{\quad} = 5 = 3$