



The Backstage Stage Snatcher

Grade 5 math · Fractions of a number, Order of operations, Multiplication, Rounding, Division · Reading level grades 5-6

Detective: _____ Date: _____

The opening night of the new Broadway musical is ruined! The Stage Snatcher has stolen the final scene of the script, leaving the cast in total chaos. We must search backstage and find the culprit before the curtain rises.

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 Stage Snatcher is _____

Possible suspects

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

NAME	ACTING STYLE	SIGNATURE PROP	PREFERRED STAGE SIDE	WIG COLOR	STAGE FRIGHT TRIGGER
Robert Downey	Action Stuntwork	Silver Tiara	Enters Stage Left	Jet Black Wig	Squeaky Floorboards
Zendaya	Musical Opera	Silver Tiara	Enters Stage Left	Powdered White Wig	Loud Hecklers
Anne Hathaway	Silent Pantomime	Leather Script Case	Enters Stage Right	Jet Black Wig	Loud Hecklers
Sadie Sink	Silent Pantomime	Feather Quill	Enters Stage Right	Jet Black Wig	Squeaky Floorboards
Danny Devito	Improv Comedy	Feather Quill	Enters Stage Left	Jet Black Wig	Squeaky Floorboards
Florence Pugh	Silent Pantomime	Golden Cane	Enters Stage Right	Crimson Red Wig	Bright Spotlight
Gaten Mataraz	Improv Comedy	Golden Cane	Enters Stage Left	Crimson Red Wig	Squeaky Floorboards
Idris Elba	Improv Comedy	Feather Quill	Enters Stage Left	Crimson Red Wig	Bright Spotlight
Timothee Chal	Shakespearean Melodrama	Silver Tiara	Enters Stage Left	Powdered White Wig	Squeaky Floorboards
Keanu Reeves	Shakespearean Melodrama	Velvet Cape	Enters Stage Left	Jet Black Wig	Squeaky Floorboards
Hugh Jackman	Action Stuntwork	Silver Tiara	Enters Stage Right	Powdered White Wig	Squeaky Floorboards
Lin Manuel	Musical Opera	Feather Quill	Enters Stage Left	Powdered White Wig	Squeaky Floorboards
Millie Brown	Improv Comedy	Leather Script Case	Enters Stage Left	Jet Black Wig	Bright Spotlight
The Rock	Musical Opera	Feather Quill	Enters Stage Right	Powdered White Wig	Squeaky Floorboards
Zac Efron	Silent Pantomime	Feather Quill	Enters Stage Left	Crimson Red Wig	Squeaky Floorboards
Chris Evans	Silent Pantomime	Leather Script Case	Enters Stage Left	Jet Black Wig	Squeaky Floorboards
Emma Watson	Improv Comedy	Leather Script Case	Enters Stage Right	Jet Black Wig	Loud Hecklers
Tom Holland	Improv Comedy	Velvet Cape	Enters Stage Left	Jet Black Wig	Squeaky Floorboards
Selena Gomez	Musical Opera	Silver Tiara	Enters Stage Right	Crimson Red Wig	Loud Hecklers
Will Smith	Musical Opera	Leather Script Case	Enters Stage Right	Jet Black Wig	Bright Spotlight
Jack Black	Shakespearean Melodrama	Feather Quill	Enters Stage Right	Crimson Red Wig	Squeaky Floorboards

Fractions of a number

To find the first clue, we need to analyze the stack of stolen scripts. The thief took exactly a fraction of the total pages printed for the rehearsal.

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

A 2x15 grid of boxes. The top row contains the following sequence: an orange box with 'T', three empty boxes, an orange box with 'T', and ten empty boxes. The bottom row contains the following sequence: one empty box, an orange box with 'T', and thirteen empty boxes. Below each box is a number. The top row numbers are: 23, 6, 38, 13, 4, 28, 26, 30, 31, 23, 37, 5, 38, 17, 7, 5, 23. The bottom row numbers are: 25, 38, 34, 30, 34, 17, 31, 28, 11, 38, 30, 23, 31, 34, 30, 34.

T									T								T
23	6	38	13	4	28	26	30	31	23	37	5	38	17	7	5	23	
												T					
25	38	34	30	34	17	31	28	11	38	30	23	31	34	30	34		

$$1/5 \text{ of } 115 = \boxed{} \rightarrow \boxed{\text{T}}$$

$2/8$ of $44 = \boxed{} \rightarrow \boxed{\mathbf{V}}$

$3/6$ of $74 = \boxed{} \rightarrow \mathbf{D}$

$$2/8 \text{ of } 100 = \boxed{} \rightarrow \boxed{\text{W}}$$

2/10 of 85 = → **S**

$$\frac{1}{4} \text{ of } 152 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$\frac{1}{3} \text{ of } 39 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$4/8 \text{ of } 52 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$\frac{1}{8} \text{ of } 48 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$1/8 \text{ of } 40 = \boxed{} \rightarrow \boxed{\text{O}}$$

2/8 of 124 = $\rightarrow$

$$3/10 \text{ of } 100 = \boxed{} \rightarrow \boxed{\text{R}}$$

$3/6$ of $8 = \boxed{} \rightarrow \boxed{\text{U}}$

$$5/10 \text{ of } 56 = \boxed{} \rightarrow \boxed{\text{L}}$$

$2/5$ of 85 = $\rightarrow$ **A**

$$2/8 \text{ of } 28 = \boxed{} \rightarrow \boxed{\text{N}}$$

Scratch space:

CLUE 2
Order of operations

Next, we search the lighting booth. To unlock the safe with the suspect list, we must solve a multi-step sequence of operations in the director's logbook.

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

L																			
35	56	75	74	75	41	41	74	63	45	36	38	74	42	25	56	45	56		
75	41	15	38	64	38	56	8	45	74	9	56	56	70	36	74				

$27 + 2 \times 4 = \square \rightarrow \boxed{\text{L}}$

$31 + 8 \times 4 = \square \rightarrow \boxed{\text{P}}$

$12 \times 7 - 28 = \square \rightarrow \boxed{\text{E}}$

$5 \times 3 - 7 = \square \rightarrow \boxed{\text{A}}$

$9 \times 11 - 25 = \square \rightarrow \boxed{\text{T}}$

$57 + 2 \times 9 = \square \rightarrow \boxed{\text{F}}$

$4 + 3 \times 7 = \square \rightarrow \boxed{\text{W}}$

$6 + 4 \times 8 = \square \rightarrow \boxed{\text{N}}$

$10 \times 7 - 29 = \square \rightarrow \boxed{\text{O}}$

$64 + 3 \times 2 = \square \rightarrow \boxed{\text{X}}$

$30 + 6 \times 2 = \square \rightarrow \boxed{\text{S}}$

$7 \times 10 - 25 = \square \rightarrow \boxed{\text{R}}$

$8 \times 6 - 12 = \square \rightarrow \boxed{\text{I}}$

$2 \times 7 - 5 = \square \rightarrow \boxed{\text{H}}$

$11 + 2 \times 2 = \square \rightarrow \boxed{\text{U}}$

$9 \times 9 - 17 = \square \rightarrow \boxed{\text{D}}$

Scratch space:

CLUE 3
Multiplication facts (1-12)

Under the trapdoor, we find rows of makeup vanity cases. Counting them row by row reveals a secret compartment holding the third clue.

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

S																		S
30	15	22	4	49	18	44	55	88	42	42	144	99	42	49	144	80	30	
				S														
4	28	14	42	30	4	80	40	72	4	40	72	9	4	55				

$6 \times 5 = \square \rightarrow$ S	$7 \times 6 = \square \rightarrow$ O	$11 \times 4 = \square \rightarrow$ Y	
$5 \times 11 = \square \rightarrow$ F	$3 \times 5 = \square \rightarrow$ Q	$2 \times 7 = \square \rightarrow$ P	
$11 \times 2 = \square \rightarrow$ U	$6 \times 12 = \square \rightarrow$ H	$10 \times 8 = \square \rightarrow$ D	
$12 \times 12 = \square \rightarrow$ R	$11 \times 8 = \square \rightarrow$ L	$5 \times 8 = \square \rightarrow$ T	
$7 \times 4 = \square \rightarrow$ X	$3 \times 3 = \square \rightarrow$ I	$9 \times 2 = \square \rightarrow$ K	$9 \times 11 = \square \rightarrow$ B
$7 \times 7 = \square \rightarrow$ A	$2 \times 2 = \square \rightarrow$ E		

Scratch space:

CLUE 4 Rounding

The decibel meter on the soundboard caught a mysterious whisper. The device only displays rounded numbers, but that estimate points us to the next hint.

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

A						A					A				A	
1700	170	3700	110	200	900	1700	130	5000	1300	1700	20	4300	700	1700	230	
900	3700	7000	110	200	3700	1300	20	2900	370							

Round 1,713 to the nearest hundred → **A**

Round 729 to the nearest hundred → **W**

Round 6,632 to the nearest thousand → **F**

Round 910 to the nearest hundred → **L**

Round 4,349 to the nearest hundred → **R**

Round 172 to the nearest ten → **J**

Round 5,124 to the nearest thousand → **K**

Round 108 to the nearest ten → **T**

Round 232 to the nearest ten → **S**

Round 133 to the nearest ten → **C**

Round 2,921 to the nearest hundred → **N**

Round 3,737 to the nearest hundred → **E**

Round 17 to the nearest ten → **I**

Round 1,320 to the nearest hundred → **H**

Round 157 to the nearest hundred → **B**

Round 374 to the nearest ten → **D**

Scratch space:

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

Finally, we divide a box of costume buttons evenly among the stagehands. The remaining buttons point to the final piece of evidence.

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:

$40 \div 8 = \boxed{}$

$6 \div 3 = \boxed{}$

$4 \div 1 = \boxed{}$

$24 \div 4 = \boxed{}$

$18 \div 6 = \boxed{}$

$11 \div 11 = \boxed{}$

$36 \div 3 = \boxed{}$

$108 \div 12 = \boxed{}$

$35 \div 5 = \boxed{}$

$80 \div 8 = \boxed{}$

$72 \div 9 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain performs a daring high wire leap, then taps a golden cane.
2. The villain cracks a hilarious joke, then swishes a velvet cape.
3. The villain silently mimes escaping, then polishes a silver tiara.
4. The villain silently mimes escaping, then zips up a leather script case.
5. The villain cracks a hilarious joke, then drops a feather quill.
6. The villain cracks a hilarious joke, then zips up a leather script case.
7. The villain sings a booming high C note, then zips up a leather script case.
8. The villain cracks a hilarious joke, then polishes a silver tiara.
9. The villain sings a booming high C note, then drops a feather quill.
10. The villain dramatically recites a monolog, then zips up a leather script case.
11. The villain dramatically recites a monolog, then swishes a velvet cape.
12. The villain performs a daring high wire leap, then drops a feather quill.

Answer Key

The Backstage Stage Snatcher

Culprit: Keanu Reeves

Shakespearean Melodrama · Velvet Cape · Enters Stage Left · Jet Black Wig · Squeaky Floorboards

Trail: Start 21 → Clue 1 16 → Clue 2 9 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE CULPRIT DOES NOT WEAR A SILVER TIARA"

$\frac{1}{5}$ of 115 = 23 (T) · $\frac{2}{8}$ of 44 = 11 (V) · $\frac{3}{6}$ of 74 = 37 (D) · $\frac{2}{8}$ of 100 = 25 (W) · $\frac{2}{10}$ of 85 = 17 (S) · $\frac{1}{4}$ of 152 = 38 (E) · $\frac{1}{3}$ of 39 = 13 (C) · $\frac{4}{8}$ of 52 = 26 (P) · $\frac{1}{8}$ of 48 = 6 (H) · $\frac{1}{8}$ of 40 = 5 (O) · $\frac{2}{8}$ of 124 = 31 (I) · $\frac{3}{10}$ of 100 = 30 (R) · $\frac{3}{6}$ of 8 = 4 (U) · $\frac{5}{10}$ of 56 = 28 (L) · $\frac{2}{5}$ of 85 = 34 (A) · $\frac{2}{8}$ of 28 = 7 (N)

Clue 2 (Order of operations): "LEFT FOOTPRINTS WERE FOUND NEAR THE EXIT"

$27 + 2 \times 4 = 35$ (L) · $31 + 8 \times 4 = 63$ (P) · $12 \times 7 - 28 = 56$ (E) · $5 \times 3 - 7 = 8$ (A) · $9 \times 11 - 25 = 74$ (T) · $57 + 2 \times 9 = 75$ (F) · $4 + 3 \times 7 = 25$ (W) · $6 + 4 \times 8 = 38$ (N) · $10 \times 7 - 29 = 41$ (O) · $64 + 3 \times 2 = 70$ (X) · $30 + 6 \times 2 = 42$ (S) · $7 \times 10 - 25 = 45$ (R) · $8 \times 6 - 12 = 36$ (I) · $2 \times 7 - 5 = 9$ (H) · $11 + 2 \times 2 = 15$ (U) · $9 \times 9 - 17 = 64$ (D)

Clue 3 (Multiplication facts (1-12)): "SQUEAKY FLOORBOARDS EXPOSED THE THIEF"

$6 \times 5 = 30$ (S) · $7 \times 6 = 42$ (O) · $11 \times 4 = 44$ (Y) · $5 \times 11 = 55$ (F) · $3 \times 5 = 15$ (Q) · $2 \times 7 = 14$ (P) · $11 \times 2 = 22$ (U) · $6 \times 12 = 72$ (H) · $10 \times 8 = 80$ (D) · $12 \times 12 = 144$ (R) · $11 \times 8 = 88$ (L) · $5 \times 8 = 40$ (T) · $7 \times 4 = 28$ (X) · $3 \times 3 = 9$ (I) · $9 \times 2 = 18$ (K) · $9 \times 11 = 99$ (B) · $7 \times 7 = 49$ (A) · $2 \times 2 = 4$ (E)

Clue 4 (Rounding): "A JET BLACK HAIR WAS LEFT BEHIND"

Round 1,713 to the nearest hundred = 1700 (A) · Round 729 to the nearest hundred = 700 (W) · Round 6,632 to the nearest thousand = 7000 (F) · Round 910 to the nearest hundred = 900 (L) · Round 4,349 to the nearest hundred = 4300 (R) · Round 172 to the nearest ten = 170 (J) · Round 5,124 to the nearest thousand = 5000 (K) · Round 108 to the nearest ten = 110 (T) · Round 232 to the nearest ten = 230 (S) · Round 133 to the nearest ten = 130 (C) · Round 2,921 to the nearest hundred = 2900 (N) · Round 3,737 to the nearest hundred = 3700 (E) · Round 17 to the nearest ten = 20 (I) · Round 1,320 to the nearest hundred = 1300 (H) · Round 157 to the nearest hundred = 200 (B) · Round 374 to the nearest ten = 370 (D)

Clue 5 (Division facts (1-12)): surviving statement is box 11 → Keanu Reeves

$40 \div 8 = 5$ · $6 \div 3 = 2$ · $4 \div 1 = 4$ · $24 \div 4 = 6$ · $18 \div 6 = 3$ · $11 \div 11 = 1$ · $36 \div 3 = 12$ · $108 \div 12 = 9$ · $35 \div 5 = 7$ · $80 \div 8 = 10$ · $72 \div 9 = 8$