



The Sunken Citadel Showdown

Grade 5 math · Subtraction, Addition, Multiplication, Fractions of a number, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

A rogue warrior breached the Sunken Citadel and disarmed the High Guard Commander during tournament practice. The Grand Master needs your deduction skills to unmask the attacker before the realm grand finals begin.

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 warrior is _____

Possible suspects

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

NAME	COMBAT STYLE	AETHER ABILITY	GAUNTLET TYPE	HAIRSTYLE	BATTLE VULNERABILITY
Roman	Brass Fist Impact	Glow Aura	Wears Silver Gauntlets	Flowing Crimson Locks	Trapped By Web Nets
Vesper	Shadow Dagger Strike	Echo Dash	Wears Golden Gauntlets	Braided Topknot	Trapped By Web Nets
Sylas	Thunder Shield Style	Glow Aura	Wears Silver Gauntlets	Flowing Crimson Locks	Trapped By Web Nets
Garrick	Flame Blade Mastery	Stone Armor	Wears Silver Gauntlets	Spiky Silver Crest	Stunned By Bell Resonance
Cassian	Thunder Shield Style	Wind Sprint	Wears Silver Gauntlets	Braided Topknot	Trapped By Web Nets
Kira	Flame Blade Mastery	Wind Sprint	Wears Silver Gauntlets	Flowing Crimson Locks	Blinded By Flash Bombs
Valerie	Flame Blade Mastery	Glow Aura	Wears Silver Gauntlets	Flowing Crimson Locks	Stunned By Bell Resonance
Kaelen	Frost Spear Technique	Echo Dash	Wears Silver Gauntlets	Flowing Crimson Locks	Trapped By Web Nets
Ryan	Frost Spear Technique	Stone Armor	Wears Golden Gauntlets	Spiky Silver Crest	Blinded By Flash Bombs
Roran	Frost Spear Technique	Glow Aura	Wears Golden Gauntlets	Flowing Crimson Locks	Trapped By Web Nets
Orion	Thunder Shield Style	Iron Stance	Wears Silver Gauntlets	Flowing Crimson Locks	Blinded By Flash Bombs
Donnie	Shadow Dagger Strike	Iron Stance	Wears Silver Gauntlets	Braided Topknot	Blinded By Flash Bombs
Titus	Shadow Dagger Strike	Glow Aura	Wears Golden Gauntlets	Spiky Silver Crest	Blinded By Flash Bombs
Lyra	Frost Spear Technique	Wind Sprint	Wears Silver Gauntlets	Flowing Crimson Locks	Trapped By Web Nets
Jax	Brass Fist Impact	Iron Stance	Wears Golden Gauntlets	Flowing Crimson Locks	Trapped By Web Nets
Ember	Brass Fist Impact	Iron Stance	Wears Golden Gauntlets	Braided Topknot	Trapped By Web Nets
Darian	Shadow Dagger Strike	Iron Stance	Wears Golden Gauntlets	Spiky Silver Crest	Stunned By Bell Resonance
Talon	Thunder Shield Style	Echo Dash	Wears Silver Gauntlets	Flowing Crimson Locks	Trapped By Web Nets
Mirei	Thunder Shield Style	Stone Armor	Wears Silver Gauntlets	Braided Topknot	Stunned By Bell Resonance
Cyrus	Flame Blade Mastery	Glow Aura	Wears Silver Gauntlets	Spiky Silver Crest	Trapped By Web Nets
Brea	Brass Fist Impact	Echo Dash	Wears Golden Gauntlets	Braided Topknot	Blinded By Flash Bombs

CLUE 1
Subtraction

You review the guard log to find out how many enchanted weapons vanished from the armory after the intruder fled.

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

T																		
6137	2348	6148	5047	6960	4981	7260	6148	1789	6252	5047	5047	8902	6960	5047	4403	8902	4403	

		T													T
2883	6960	6137	7260	4304	6148	1789	8902	2883	4403	4304	2590	5047	8902	2883	6137

$10116 - 3979 = \boxed{} \rightarrow \boxed{T}$

$2661 - 71 = \boxed{} \rightarrow \boxed{P}$

$5088 - 41 = \boxed{} \rightarrow \boxed{R}$

$6582 - 4234 = \boxed{} \rightarrow \boxed{H}$

$5650 - 2767 = \boxed{} \rightarrow \boxed{N}$

$11798 - 4538 = \boxed{} \rightarrow \boxed{U}$

$3252 - 1463 = \boxed{} \rightarrow \boxed{W}$

$6284 - 1980 = \boxed{} \rightarrow \boxed{S}$

$10659 - 1757 = \boxed{} \rightarrow \boxed{I}$

$8127 - 3146 = \boxed{} \rightarrow \boxed{G}$

$9805 - 3553 = \boxed{} \rightarrow \boxed{A}$

$6240 - 1837 = \boxed{} \rightarrow \boxed{D}$

$8097 - 1137 = \boxed{} \rightarrow \boxed{O}$

$10373 - 4225 = \boxed{} \rightarrow \boxed{E}$

Scratch space:

CLUE 2 Addition

You tally up all the elemental crystals collected from the training courtyard to calculate the total energy used.

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

T									T										
3546	3227	6310	3876	8090	3876	4961	6310	5185	3546	2629	6037	9624	6310	3876	3227	3580	5951	3942	
									T			T							
3876	3580	3875	9469	6310	9624	7617	9651	8090	5951	3546	3875	6310	3546	3876					

$2030 + 1516 = \square \rightarrow \mathbf{T}$	$5297 + 2793 = \square \rightarrow \mathbf{U}$	$1296 + 1333 = \square \rightarrow \mathbf{W}$
$1457 + 2419 = \square \rightarrow \mathbf{S}$	$1685 + 3500 = \square \rightarrow \mathbf{C}$	$4403 + 3214 = \square \rightarrow \mathbf{G}$
$3702 + 5949 = \square \rightarrow \mathbf{A}$	$3823 + 5801 = \square \rightarrow \mathbf{R}$	$2012 + 1863 = \square \rightarrow \mathbf{L}$
$2484 + 3553 = \square \rightarrow \mathbf{O}$	$1824 + 1403 = \square \rightarrow \mathbf{H}$	$2403 + 3548 = \square \rightarrow \mathbf{N}$
$4553 + 4916 = \square \rightarrow \mathbf{V}$	$3145 + 1816 = \square \rightarrow \mathbf{P}$	$1697 + 2245 = \square \rightarrow \mathbf{Y}$
$1973 + 1607 = \square \rightarrow \mathbf{I}$	$3687 + 2623 = \square \rightarrow \mathbf{E}$	

Scratch space:

CLUE 3 Multiplication facts (1-12)

You inspect rows of weapon racks in the arena hall to determine the total number of spears stored before the duel.

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

Diagram illustrating a multiplication table structure with two rows of boxes. The top row contains 12 boxes, and the bottom row contains 8 boxes. The boxes are arranged in a grid, with some boxes shaded orange and containing the letter 'T'.

Top row boxes (from left to right):

- Box 1: Shaded orange, contains 'T'. Below it is the number 63.
- Box 2: Below it is the number 4.
- Box 3: Below it is the number 24.
- Box 4: Below it is the number 6.
- Box 5: Below it is the number 44.
- Box 6: Below it is the number 28.
- Box 7: Below it is the number 28.
- Box 8: Below it is the number 49.
- Box 9: Below it is the number 121.
- Box 10: Below it is the number 28.
- Box 11: Below it is the number 6.
- Box 12: Below it is the number 44.
- Box 13: Below it is the number 96.

Bottom row boxes (from left to right):

- Box 1: Below it is the number 49.
- Box 2: Below it is the number 144.
- Box 3: Below it is the number 6.
- Box 4: Below it is the number 24.
- Box 5: Below it is the number 88.
- Box 6: Below it is the number 144.
- Box 7: Below it is the number 24.
- Box 8: Shaded orange, contains 'T'. Below it is the number 63.
- Box 9: Below it is the number 96.

$9 \times 7 = \boxed{} \rightarrow \boxed{\text{T}}$

$$2 \times 2 = \boxed{} \rightarrow \boxed{\text{H}}$$

$9 \times 6 = \boxed{} \rightarrow \boxed{\text{P}}$

$$11 \times 11 = \boxed{} \rightarrow \boxed{0}$$

$4 \times 11 = \boxed{} \rightarrow \boxed{\mathbf{A}}$

$$12 \times 2 = \boxed{} \rightarrow \boxed{\text{E}}$$

$7 \times 7 = \square \rightarrow \boxed{1}$

$$12 \times 12 = \boxed{} \rightarrow \boxed{\text{N}}$$

$12 \times 8 = \boxed{} \rightarrow \boxed{\text{S}}$

$5 \times 5 = \square \rightarrow \boxed{\mathbf{D}}$

$$11 \times 8 = \boxed{} \rightarrow \boxed{\mathbf{B}}$$

$$4 \times 7 = \boxed{} \rightarrow \boxed{\mathbf{R}}$$

$$2 \times 3 = \boxed{} \rightarrow \boxed{\mathbf{W}}$$

Scratch space:

CLUE 4

Fractions of a number

You analyze the arena damage report to find out what fraction of the magic barriers remained intact.

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

F																			
30	21	20	26	36	15	5	29	18	36	9	25	20	15	21	20	29	14	25	
26	7	18	7	30	20	19	15	31	38	16	25	29	7	15	7				

$$3/8 \text{ of } 80 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$1/2 \text{ of } 62 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$3/8 \text{ of } 48 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$2/6 \text{ of } 48 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$3/10 \text{ of } 50 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$1/3 \text{ of } 15 = \boxed{} \rightarrow \boxed{\text{G}}$$

$$2/8 \text{ of } 36 = \boxed{} \rightarrow \boxed{\text{M}}$$

$$2/5 \text{ of } 95 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$2/10 \text{ of } 145 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$5/10 \text{ of } 50 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$1/2 \text{ of } 52 = \boxed{} \rightarrow \boxed{\text{W}}$$

$$5/10 \text{ of } 42 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$3/8 \text{ of } 96 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$2/5 \text{ of } 35 = \boxed{} \rightarrow \boxed{\text{K}}$$

$$1/6 \text{ of } 114 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$1/10 \text{ of } 70 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$3/6 \text{ of } 40 = \boxed{} \rightarrow \boxed{\text{O}}$$

Scratch space:

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

You distribute recovered brass knuckles equally among the realm guards to determine each guard share.

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:

$27 \div 3 = \boxed{}$

$4 \div 2 = \boxed{}$

$30 \div 3 = \boxed{}$

$40 \div 10 = \boxed{}$

$15 \div 5 = \boxed{}$

$32 \div 4 = \boxed{}$

$45 \div 9 = \boxed{}$

$6 \div 6 = \boxed{}$

$33 \div 3 = \boxed{}$

$49 \div 7 = \boxed{}$

$24 \div 4 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain thrust with a frost spear, then assumed an iron stance.
2. The villain bashed with a thunder shield, then activated a glow aura.
3. The villain struck with brass knuckles, then performed an echo dash.
4. The villain slashed with a flame blade, then used a wind sprint.
5. The villain thrust with a frost spear, then hardened stone armor.
6. The villain lunged with a shadow dagger, then hardened stone armor.
7. The villain lunged with a shadow dagger, then activated a glow aura.
8. The villain struck with brass knuckles, then hardened stone armor.
9. The villain bashed with a thunder shield, then performed an echo dash.
10. The villain struck with brass knuckles, then activated a glow aura.
11. The villain thrust with a frost spear, then used a wind sprint.
12. The villain thrust with a frost spear, then performed an echo dash.

Answer Key

The Sunken Citadel Showdown

Culprit: Kaelen

Frost Spear Technique · Echo Dash · Wears Silver Gauntlets · Flowing Crimson Locks · Trapped By Web Nets

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Subtraction): "THE ROGUE WARRIOR DID NOT USE WIND SPRINT"

10116 - 3979 = 6137 (T) · 2661 - 71 = 2590 (P) · 5088 - 41 = 5047 (R) · 6582 - 4234 = 2348 (H) · 5650 - 2767 = 2883 (N) · 11798 - 4538 = 7260 (U) · 3252 - 1463 = 1789 (W) · 6284 - 1980 = 4304 (S) · 10659 - 1757 = 8902 (I) · 8127 - 3146 = 4981 (G) · 9805 - 3553 = 6252 (A) · 6240 - 1837 = 4403 (D) · 8097 - 1137 = 6960 (O) · 10373 - 4225 = 6148 (E)

Clue 2 (Addition): "THE SUSPECT WORE SHINY SILVER GAUNTLETS"

2030 + 1516 = 3546 (T) · 5297 + 2793 = 8090 (U) · 1296 + 1333 = 2629 (W) · 1457 + 2419 = 3876 (S) · 1685 + 3500 = 5185 (C) · 4403 + 3214 = 7617 (G) · 3702 + 5949 = 9651 (A) · 3823 + 5801 = 9624 (R) · 2012 + 1863 = 3875 (L) · 2484 + 3553 = 6037 (O) · 1824 + 1403 = 3227 (H) · 2403 + 3548 = 5951 (N) · 4553 + 4916 = 9469 (V) · 3145 + 1816 = 4961 (P) · 1697 + 2245 = 3942 (Y) · 1973 + 1607 = 3580 (I) · 3687 + 2623 = 6310 (E)

Clue 3 (Multiplication facts (1-12)): "THE WARRIOR WAS TRAPPED IN WEB NETS"

9 × 7 = 63 (T) · 2 × 2 = 4 (H) · 9 × 6 = 54 (P) · 11 × 11 = 121 (O) · 4 × 11 = 44 (A) · 12 × 2 = 24 (E) · 7 × 7 = 49 (I) · 12 × 12 = 144 (N) · 12 × 8 = 96 (S) · 5 × 5 = 25 (D) · 11 × 8 = 88 (B) · 4 × 7 = 28 (R) · 2 × 3 = 6 (W)

Clue 4 (Fractions of a number): "FLOWING CRIMSON LOCKS WERE FOUND AT SCENE"

3/8 of 80 = 30 (F) · 1/2 of 62 = 31 (D) · 3/8 of 48 = 18 (R) · 2/6 of 48 = 16 (T) · 3/10 of 50 = 15 (N) · 1/3 of 15 = 5 (G) · 2/8 of 36 = 9 (M) · 2/5 of 95 = 38 (A) · 2/10 of 145 = 29 (C) · 5/10 of 50 = 25 (S) · 1/2 of 52 = 26 (W) · 5/10 of 42 = 21 (L) · 3/8 of 96 = 36 (I) · 2/5 of 35 = 14 (K) · 1/6 of 114 = 19 (U) · 1/10 of 70 = 7 (E) · 3/6 of 40 = 20 (O)

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

27 ÷ 3 = 9 · 4 ÷ 2 = 2 · 30 ÷ 3 = 10 · 40 ÷ 10 = 4 · 15 ÷ 5 = 3 · 32 ÷ 4 = 8 · 45 ÷ 9 = 5 · 6 ÷ 6 = 1 · 33 ÷ 3 = 11 · 49 ÷ 7 = 7 · 24 ÷ 4 = 6