



The Forsaken Arena Heist

Grade 8 math · Subtraction, Addition, Fractions of a number, Skip counting · Reading level grades 7-9

Detective: _____ Date: _____

A mysterious combatant has broken into the sacred vault inside the Forsaken Arena and stolen the ancient Crest of Souls from the Grand Archivist. You must analyze the debris, battle trails, and combat logs to identify the thief.

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 gladiator is _____

Possible suspects

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

NAME	FIGHTING STYLE	SPECIAL SKILL	COMBAT STANCE	HELMET PLUME	ELEMENTAL WEAKNESS
RogueSpectre	Viper Daggers	Soul Shield	right handed grip	shadowy hood	ice bombs
BetaKnight	Viper Daggers	Soul Shield	left handed grip	shadowy hood	ice bombs
SoulReaper	Viper Daggers	Flame Dash	left handed grip	silver spikes	ice bombs
OmegaReaper	Viper Daggers	Double Jump	left handed grip	shadowy hood	ice bombs
VoidWalker	Tempest Katana	Flame Dash	left handed grip	shadowy hood	lightning trap
ShadowSlayer	Tempest Katana	Soul Shield	left handed grip	crimson plume	ice bombs
CrimsonFrenzy	Void Staff	Double Jump	right handed grip	crimson plume	ice bombs
GigaChadCombat	Void Staff	Double Jump	right handed grip	shadowy hood	lightning trap
Darkness_Rises	Abyssal Greatsword	Double Jump	left handed grip	crimson plume	lightning trap
ProGamerXZ	Viper Daggers	Flame Dash	left handed grip	shadowy hood	ice bombs
ChronoBlade	Tempest Katana	Soul Shield	left handed grip	silver spikes	holy water
HyperBlade	Tempest Katana	Shadow Step	left handed grip	shadowy hood	lightning trap
NeonViper	Viper Daggers	Shadow Step	right handed grip	silver spikes	ice bombs
SwordMaster	Shattered Halberd	Soul Shield	left handed grip	shadowy hood	ice bombs
SwiftDagger	Viper Daggers	Shadow Step	left handed grip	silver spikes	lightning trap
NoobSlayer99	Tempest Katana	Flame Dash	right handed grip	crimson plume	ice bombs
ZenithCombat	Shattered Halberd	Health Regen	left handed grip	shadowy hood	ice bombs
ScytheMaster	Tempest Katana	Double Jump	right handed grip	shadowy hood	lightning trap
GlitchKing	Viper Daggers	Soul Shield	left handed grip	shadowy hood	lightning trap
FrostBite	Abyssal Greatsword	Flame Dash	right handed grip	shadowy hood	holy water
Valkyrie_Lord	Void Staff	Shadow Step	left handed grip	silver spikes	lightning trap

CLUE 1 Subtraction

Subtracting the destroyed training dummies from the total inventory reveals how many weapons the thief tested before fleeing.

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

T			T					T											
6279	3647	3569	6279	5692	6681	7623	3569	6279	3746	8817	3569	6901	4580	8817	6279	1805	6901	3569	

3746	8817	1805	5223	7239	3569	2419	1805	2321	1103

$6931 - 652 = \square \rightarrow \boxed{\text{T}}$	$9009 - 1770 = \square \rightarrow \boxed{\text{L}}$	$13237 - 4420 = \square \rightarrow \boxed{\text{O}}$
$6812 - 3165 = \square \rightarrow \boxed{\text{H}}$	$6851 - 2271 = \square \rightarrow \boxed{\text{N}}$	$1988 - 885 = \square \rightarrow \boxed{\text{P}}$
$9941 - 3260 = \square \rightarrow \boxed{\text{R}}$	$10400 - 4708 = \square \rightarrow \boxed{\text{A}}$	$8683 - 1060 = \square \rightarrow \boxed{\text{G}}$
$7244 - 4923 = \square \rightarrow \boxed{\text{M}}$	$11180 - 4279 = \square \rightarrow \boxed{\text{S}}$	$5758 - 3953 = \square \rightarrow \boxed{\text{U}}$
$7486 - 2263 = \square \rightarrow \boxed{\text{B}}$	$7728 - 4159 = \square \rightarrow \boxed{\text{E}}$	$6780 - 3034 = \square \rightarrow \boxed{\text{D}}$
$5554 - 3135 = \square \rightarrow \boxed{\text{J}}$		

Scratch space:

CLUE 2 Addition

Adding up the fragments of broken armor left in the arena corridor gives us the exact weight of the thief's gear.

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

T																			
9229	4422	5657	4300	4422	7931	7812	4957	7931	6526	9229	4422	5657	7812	7931	2474	2474	5602	7951	
4957	4422	7025	8240	5602	2474	5657	8714	9229	4422	5602	6526	5655	5657	5655	6958	7951	7931	7812	

3840 + 5389 = → T	1610 + 864 = → L	3334 + 3691 = → O
3111 + 2491 = → A	5028 + 3212 = → W	2597 + 5215 = → P
3457 + 2198 = → D	3018 + 1404 = → H	4475 + 3456 = → I
3923 + 4028 = → R	3127 + 1830 = → S	3449 + 2208 = → E
2454 + 1846 = → C	2696 + 6018 = → F	3243 + 3715 = → G
2244 + 4282 = → N		

Scratch space:

CLUE 3

Fractions of a number

By calculating the fraction of corrupted soul crystals remaining in the chest, we can determine the power level of the stolen artifact.

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

F																		
52	31	36	47	46	22	19	31	8	19	58	53	31	46	23	46	8	59	8
40	46	8	58	22	46	53	53	45	36	32	19	46	9	36	42	9	53	

$4/6 \text{ of } 78 = \square \rightarrow \boxed{\text{F}}$

$4/8 \text{ of } 64 = \square \rightarrow \boxed{\text{I}}$

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

$4/8 \text{ of } 62 = \square \rightarrow \boxed{\text{R}}$

$1/4 \text{ of } 160 = \square \rightarrow \boxed{\text{W}}$

$1/3 \text{ of } 174 = \square \rightarrow \boxed{\text{K}}$

$2/6 \text{ of } 57 = \square \rightarrow \boxed{\text{C}}$

$3/8 \text{ of } 112 = \square \rightarrow \boxed{\text{M}}$

$2/4 \text{ of } 72 = \square \rightarrow \boxed{\text{O}}$

$1/2 \text{ of } 94 = \square \rightarrow \boxed{\text{Z}}$

$1/3 \text{ of } 159 = \square \rightarrow \boxed{\text{S}}$

$5/6 \text{ of } 54 = \square \rightarrow \boxed{\text{T}}$

$4/6 \text{ of } 12 = \square \rightarrow \boxed{\text{A}}$

$5/10 \text{ of } 46 = \square \rightarrow \boxed{\text{V}}$

$1/5 \text{ of } 110 = \square \rightarrow \boxed{\text{N}}$

$2/8 \text{ of } 184 = \square \rightarrow \boxed{\text{E}}$

$1/3 \text{ of } 177 = \square \rightarrow \boxed{\text{L}}$

Scratch space:

CLUE 4 Skip counting

Count the repeating pattern of sword slashes on the stone wall to track the rapid escape route of the suspect.

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

T																
10	40	42	24	50	35	33	120	45	14	33	50	42	39	120		
							T									
50	15	35	40	24	9	20	10	40	33	20	26	33	100	40	55	6
26	40	40	100													

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

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 → **R**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, __, 60, 70 → **B**

Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 → **S**

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

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

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, __, 45, 50 → **O**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 → **L**

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

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

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

Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 → **Y**

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

Scratch space:

CLUE 5**Fractions of a number - the last clue**

Working out the fraction of health potions drained from the supply rack tells us exactly how much damage the villain took during the heist.

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:

$2/10 \text{ of } 5 = \boxed{}$

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

$2/4 \text{ of } 4 = \boxed{}$

$1/10 \text{ of } 30 = \boxed{}$

$1/5 \text{ of } 20 = \boxed{}$

$6/8 \text{ of } 12 = \boxed{}$

$4/8 \text{ of } 24 = \boxed{}$

$5/8 \text{ of } 8 = \boxed{}$

$2/4 \text{ of } 22 = \boxed{}$

$4/10 \text{ of } 15 = \boxed{}$

$3/6 \text{ of } 20 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain thrust forward with the Shattered Halberd, then blocked the counterattack with Soul Shield.
2. The villain slashed rapidly with Viper Daggers, then blocked the counterattack with Soul Shield.
3. The villain cast dark magic using the Void Staff, then vanished instantly using Shadow Step.
4. The villain swung the heavy Abyssal Greatsword, then healed their wounds with Health Regen.
5. The villain struck with the Tempest Katana, then healed their wounds with Health Regen.
6. The villain struck with the Tempest Katana, then blocked the counterattack with Soul Shield.
7. The villain thrust forward with the Shattered Halberd, then healed their wounds with Health Regen.
8. The villain slashed rapidly with Viper Daggers, then escaped the room using Flame Dash.
9. The villain cast dark magic using the Void Staff, then escaped the room using Flame Dash.
10. The villain thrust forward with the Shattered Halberd, then escaped the room using Flame Dash.
11. The villain thrust forward with the Shattered Halberd, then vanished instantly using Shadow Step.
12. The villain struck with the Tempest Katana, then escaped the room using Flame Dash.

Answer Key

The Forsaken Arena Heist

Culprit: ProGamerXZ

Viper Daggers · Flame Dash · left handed grip · shadowy hood · ice bombs

Trail: Start 21 → Clue 1 16 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Subtraction): "THE TARGET DOES NOT USE DOUBLE JUMP"

$6931 - 652 = 6279$ (T) · $9009 - 1770 = 7239$ (L) · $13237 - 4420 = 8817$ (O) · $6812 - 3165 = 3647$ (H) · $6851 - 2271 = 4580$ (N) · $1988 - 885 = 1103$ (P) · $9941 - 3260 = 6681$ (R) · $10400 - 4708 = 5692$ (A) · $8683 - 1060 = 7623$ (G) · $7244 - 4923 = 2321$ (M) · $11180 - 4279 = 6901$ (S) · $5758 - 3953 = 1805$ (U) · $7486 - 2263 = 5223$ (B) · $7728 - 4159 = 3569$ (E) · $6780 - 3034 = 3746$ (D) · $5554 - 3135 = 2419$ (J)

Clue 2 (Addition): "THE CHIPS IN THE PILLAR SHOW A LEFT HANDED GRIP"

$3840 + 5389 = 9229$ (T) · $1610 + 864 = 2474$ (L) · $3334 + 3691 = 7025$ (O) · $3111 + 2491 = 5602$ (A) · $5028 + 3212 = 8240$ (W) · $2597 + 5215 = 7812$ (P) · $3457 + 2198 = 5655$ (D) · $3018 + 1404 = 4422$ (H) · $4475 + 3456 = 7931$ (I) · $3923 + 4028 = 7951$ (R) · $3127 + 1830 = 4957$ (S) · $3449 + 2208 = 5657$ (E) · $2454 + 1846 = 4300$ (C) · $2696 + 6018 = 8714$ (F) · $3243 + 3715 = 6958$ (G) · $2244 + 4282 = 6526$ (N)

Clue 3 (Fractions of a number): "FROZEN CRACKS REVEAL A WEAKNESS TO ICE BOMBS"

$\frac{4}{6}$ of 78 = 52 (F) · $\frac{4}{8}$ of 64 = 32 (I) · $\frac{2}{8}$ of 36 = 9 (B) · $\frac{4}{8}$ of 62 = 31 (R) · $\frac{1}{4}$ of 160 = 40 (W) · $\frac{1}{3}$ of 174 = 58 (K) · $\frac{2}{6}$ of 57 = 19 (C) · $\frac{3}{8}$ of 112 = 42 (M) · $\frac{2}{4}$ of 72 = 36 (O) · $\frac{1}{2}$ of 94 = 47 (Z) · $\frac{1}{3}$ of 159 = 53 (S) · $\frac{5}{6}$ of 54 = 45 (T) · $\frac{4}{6}$ of 12 = 8 (A) · $\frac{5}{10}$ of 46 = 23 (V) · $\frac{1}{5}$ of 110 = 22 (N) · $\frac{2}{8}$ of 184 = 46 (E) · $\frac{1}{3}$ of 177 = 59 (L)

Clue 4 (Skip counting): "TORN BLACK FABRIC BELONGS TO A SHADOWY HOOD"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (T) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 = 15 (E) · Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 = 9 (G) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (R) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, __, 60, 70 = 50 (B) · Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 = 20 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (W) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 = 45 (K) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 = 24 (N) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (I) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 = 120 (C) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, __, 45, 50 = 40 (O) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (L) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (A) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (H) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (Y) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 = 14 (F)

Clue 5 (Fractions of a number): surviving statement is box 8 → ProGamerXZ

$\frac{2}{10}$ of 5 = 1 · $\frac{1}{10}$ of 70 = 7 · $\frac{2}{4}$ of 4 = 2 · $\frac{1}{10}$ of 30 = 3 · $\frac{1}{5}$ of 20 = 4 · $\frac{6}{8}$ of 12 = 9 · $\frac{4}{8}$ of 24 = 12 · $\frac{5}{8}$ of 8 = 5 · $\frac{2}{4}$ of 22 = 11 · $\frac{4}{10}$ of 15 = 6 · $\frac{3}{6}$ of 20 = 10