



The Sabotage of Astraea Arena

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

Detective: _____ Date: _____

A shadowed warrior crashed the grand tournament and ambushed the High Templar before vanishing into the arena tunnels. Match the clues to unmask the rogue champion!

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 champion is _____

Possible suspects

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

NAME	PRIMARY WEAPON	OFFHAND GEAR	STANCE	HAIR STYLE	ELEMENTAL FEAR
Valen Star	Flame Halberd	Gilded Gauntlets	Right Handed Stance	Dark Raven Hair	Fears Loud Thunder
Theron Iron	Rune Greatsword	Dragon Cuffs	Right Handed Stance	Braided Red Hair	Fears Loud Thunder
Donnie The Brave	Flame Halberd	Dragon Cuffs	Left Handed Stance	Dark Raven Hair	Fears Bright Light
Jax Blade	Rune Greatsword	Dragon Cuffs	Left Handed Stance	Silver Crested Hair	Fears Loud Thunder
Sora The Just	Flame Halberd	Dragon Cuffs	Right Handed Stance	Braided Red Hair	Fears Loud Thunder
Lyra Sun	Rune Greatsword	Rune Knuckles	Right Handed Stance	Dark Raven Hair	Fears Loud Thunder
Orion Shadow	Rune Greatsword	Gilded Gauntlets	Right Handed Stance	Silver Crested Hair	Fears Loud Thunder
Garrick Stone	Rune Greatsword	Dragon Cuffs	Left Handed Stance	Braided Red Hair	Fears Freezing Ice
Darius Flame	Flame Halberd	Dragon Cuffs	Left Handed Stance	Silver Crested Hair	Fears Loud Thunder
Caius Ember	Flame Halberd	Gilded Gauntlets	Right Handed Stance	Silver Crested Hair	Fears Bright Light
Brutus Steel	Shadow Broadsword	Dragon Cuffs	Right Handed Stance	Silver Crested Hair	Fears Bright Light
Commander Vane	Crystal Spear	Iron Cuffs	Right Handed Stance	Silver Crested Hair	Fears Loud Thunder
Captain Kael	Flame Halberd	Gilded Gauntlets	Left Handed Stance	Silver Crested Hair	Fears Loud Thunder
Elena Storm	Rune Greatsword	Dragon Cuffs	Right Handed Stance	Silver Crested Hair	Fears Loud Thunder
Magnus Glory	Crystal Spear	Gilded Gauntlets	Right Handed Stance	Silver Crested Hair	Fears Loud Thunder
Ryan The Swift	Flame Halberd	Spiked Brass Knuckles	Right Handed Stance	Braided Red Hair	Fears Loud Thunder
Marcus Spear	Crystal Spear	Gilded Gauntlets	Right Handed Stance	Silver Crested Hair	Fears Bright Light
Roman The Bold	Flame Halberd	Rune Knuckles	Right Handed Stance	Dark Raven Hair	Fears Freezing Ice
Kira Frost	Rune Greatsword	Spiked Brass Knuckles	Right Handed Stance	Silver Crested Hair	Fears Loud Thunder
Corin Shield	Shadow Broadsword	Iron Cuffs	Left Handed Stance	Braided Red Hair	Fears Loud Thunder
Cassian Oak	Shadow Broadsword	Iron Cuffs	Left Handed Stance	Braided Red Hair	Fears Freezing Ice

CLUE 1 Addition

Donnie gathered up all the dropped arena shields from the morning training sessions to count the grand total.

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

T																		
2365	8942	4673	2250	2577	4673	9395	5123	5796	4058	5194	6726	6726	9395	5194	2577	2512	5194	2512

		T												
2577	2281	2365	5644	2250	4673	5194	5189	2281	2577	6794	5644	2428	2428	2250

$1512 + 853 = \square \rightarrow \boxed{\text{T}}$

$2488 + 1570 = \square \rightarrow \boxed{\text{V}}$

$784 + 1793 = \square \rightarrow \boxed{\text{N}}$

$3005 + 3789 = \square \rightarrow \boxed{\text{C}}$

$3263 + 2381 = \square \rightarrow \boxed{\text{U}}$

$3229 + 1965 = \square \rightarrow \boxed{\text{I}}$

$1631 + 797 = \square \rightarrow \boxed{\text{F}}$

$844 + 1437 = \square \rightarrow \boxed{\text{O}}$

$1205 + 1045 = \square \rightarrow \boxed{\text{S}}$

$6266 + 3129 = \square \rightarrow \boxed{\text{A}}$

$3772 + 5170 = \square \rightarrow \boxed{\text{H}}$

$3684 + 3042 = \square \rightarrow \boxed{\text{L}}$

$2814 + 2309 = \square \rightarrow \boxed{\text{K}}$

$2516 + 3280 = \square \rightarrow \boxed{\text{Y}}$

$2816 + 1857 = \square \rightarrow \boxed{\text{E}}$

$2219 + 2970 = \square \rightarrow \boxed{\text{R}}$

$1487 + 1025 = \square \rightarrow \boxed{\text{D}}$

Scratch space:

CLUE 2 Subtraction

Roman checked the weapon rack to see how many magical swords remained after the nightly patrol took their share.

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

W											W							
1109	3550	3751	6735	6889	3604	3604	6889	3604	3604	2653	1109	2653	7473	3550	8692	2694	3751	
						W												
2694	2653	6735	7781	6889	7781	1109	2653	7473	7473	3550	5246	7473	6889	3604	1209	2653	8230	6889

$4080 - 2971 = \square \rightarrow \boxed{W}$

$11778 - 3997 = \square \rightarrow \boxed{D}$

$4228 - 678 = \square \rightarrow \boxed{I}$

$5253 - 7 = \square \rightarrow \boxed{O}$

$2542 - 1333 = \square \rightarrow \boxed{C}$

$11015 - 2785 = \square \rightarrow \boxed{P}$

$11368 - 4479 = \square \rightarrow \boxed{E}$

$10037 - 1345 = \square \rightarrow \boxed{G}$

$7432 - 3828 = \square \rightarrow \boxed{S}$

$11613 - 4878 = \square \rightarrow \boxed{N}$

$7500 - 3749 = \square \rightarrow \boxed{T}$

$11912 - 4439 = \square \rightarrow \boxed{R}$

$3568 - 915 = \square \rightarrow \boxed{A}$

$3940 - 1246 = \square \rightarrow \boxed{H}$

Scratch space:

CLUE 3

Multiplication facts (1-12)

Ryan organized the arena vault into equal rows of enchanted spears to calculate the full armor inventory.

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

T																	
132	88	16	60	45	2	2	84	45	10	14	2	16	11	14	9	48	32

				T							
2	48	81	11	132	88	81	10	11	16	9	

$11 \times 12 = \square \rightarrow \boxed{\text{T}}$

$7 \times 2 = \square \rightarrow \boxed{\text{F}}$

$10 \times 1 = \square \rightarrow \boxed{\text{N}}$

$10 \times 6 = \square \rightarrow \boxed{\text{V}}$

$7 \times 12 = \square \rightarrow \boxed{\text{A}}$

$9 \times 1 = \square \rightarrow \boxed{\text{R}}$

$8 \times 2 = \square \rightarrow \boxed{\text{E}}$

$5 \times 9 = \square \rightarrow \boxed{\text{I}}$

$9 \times 9 = \square \rightarrow \boxed{\text{U}}$

$11 \times 1 = \square \rightarrow \boxed{\text{D}}$

$4 \times 8 = \square \rightarrow \boxed{\text{M}}$

$8 \times 11 = \square \rightarrow \boxed{\text{H}}$

$1 \times 2 = \square \rightarrow \boxed{\text{L}}$

$6 \times 8 = \square \rightarrow \boxed{\text{O}}$

Scratch space:

CLUE 4 Fractions of a number

The Templar calculated what fractional share of the kingdom crests belonged to the elite vanguard.

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

$\frac{1}{3}$ of 9 = $\rightarrow$ **S**

3/6 of 42 = → **T**

$2/8$ of $24 = \square \rightarrow \mathbf{A}$

$1/6$ of 144 = $\rightarrow$ **W**

$2/8$ of $92 = \boxed{} \rightarrow \boxed{\text{C}}$

4/8 of 74 = → **F**

$$2/6 \text{ of } 75 = \boxed{} \rightarrow \boxed{\mathbf{V}}$$

$$\frac{1}{3} \text{ of } 24 = \boxed{} \rightarrow \boxed{\text{L}}$$

$\frac{1}{4}$ of 36 = $\rightarrow$ **D**

$2/8$ of 64 = $\rightarrow$ **N**

2/8 of 140 = →

4/8 of 26 = → **E**

$$1/6 \text{ of } 108 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$\frac{1}{3} \text{ of } 36 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$1/10 \text{ of } 170 = \boxed{} \rightarrow \boxed{\text{I}}$$

Scratch space:

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

The Forge Master split the supply of power gems evenly among all the guard stations across the arena gates.

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:

$24 \div 2 = \boxed{}$

$44 \div 11 = \boxed{}$

$10 \div 1 = \boxed{}$

$48 \div 6 = \boxed{}$

$63 \div 7 = \boxed{}$

$132 \div 12 = \boxed{}$

$12 \div 12 = \boxed{}$

$56 \div 8 = \boxed{}$

$55 \div 11 = \boxed{}$

$12 \div 2 = \boxed{}$

$20 \div 10 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain hurled a thunder trident, then smashed with ancient dragon cuffs.
2. The villain thrust a crystal spear, then struck with spiked brass knuckles.
3. The villain swung a rune greatsword, then smashed with ancient dragon cuffs.
4. The villain thrust a crystal spear, then punched with gilded gauntlets.
5. The villain thrust a crystal spear, then clanked with heavy iron cuffs.
6. The villain slashed with a flame halberd, then clanked with heavy iron cuffs.
7. The villain swung a shadow broadsword, then clanked with heavy iron cuffs.
8. The villain slashed with a flame halberd, then bashed with magical rune knuckles.
9. The villain swung a rune greatsword, then bashed with magical rune knuckles.
10. The villain swung a rune greatsword, then punched with gilded gauntlets.
11. The villain swung a shadow broadsword, then smashed with ancient dragon cuffs.
12. The villain swung a rune greatsword, then struck with spiked brass knuckles.

Answer Key

The Sabotage of Astraea Arena

Culprit: Elena Storm

Rune Greatsword · Dragon Cuffs · Right Handed Stance · Silver Crested Hair · Fears Loud Thunder

Trail: Start 21 → Clue 1 18 → Clue 2 13 → Clue 3 9 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNEAKY VILLAIN DID NOT USE IRON CUFFS"

$1512 + 853 = 2365$ (T) · $2488 + 1570 = 4058$ (V) · $784 + 1793 = 2577$ (N) · $3005 + 3789 = 6794$ (C) · $3263 + 2381 = 5644$ (U) · $3229 + 1965 = 5194$ (I) · $1631 + 797 = 2428$ (F) · $844 + 1437 = 2281$ (O) · $1205 + 1045 = 2250$ (S) · $6266 + 3129 = 9395$ (A) · $3772 + 5170 = 8942$ (H) · $3684 + 3042 = 6726$ (L) · $2814 + 2309 = 5123$ (K) · $2516 + 3280 = 5796$ (Y) · $2816 + 1857 = 4673$ (E) · $2219 + 2970 = 5189$ (R) · $1487 + 1025 = 2512$ (D)

Clue 2 (Subtraction): "WITNESSES SAW A RIGHT HANDED WARRIOR ESCAPE"

$4080 - 2971 = 1109$ (W) · $11778 - 3997 = 7781$ (D) · $4228 - 678 = 3550$ (I) · $5253 - 7 = 5246$ (O) · $2542 - 1333 = 1209$ (C) · $11015 - 2785 = 8230$ (P) · $11368 - 4479 = 6889$ (E) · $10037 - 1345 = 8692$ (G) · $7432 - 3828 = 3604$ (S) · $11613 - 4878 = 6735$ (N) · $7500 - 3749 = 3751$ (T) · $11912 - 4439 = 7473$ (R) · $3568 - 915 = 2653$ (A) · $3940 - 1246 = 2694$ (H)

Clue 3 (Multiplication facts (1-12)): "THE VILLAIN FLED FROM LOUD THUNDER"

$11 \times 12 = 132$ (T) · $7 \times 2 = 14$ (F) · $10 \times 1 = 10$ (N) · $10 \times 6 = 60$ (V) · $7 \times 12 = 84$ (A) · $9 \times 1 = 9$ (R) · $8 \times 2 = 16$ (E) · $5 \times 9 = 45$ (I) · $9 \times 9 = 81$ (U) · $11 \times 1 = 11$ (D) · $4 \times 8 = 32$ (M) · $8 \times 11 = 88$ (H) · $1 \times 2 = 2$ (L) · $6 \times 8 = 48$ (O)

Clue 4 (Fractions of a number): "STRANDS OF SILVER CRESTED HAIR WERE LEFT"

$\frac{1}{3}$ of 9 = 3 (S) · $\frac{3}{6}$ of 42 = 21 (T) · $\frac{2}{8}$ of 24 = 6 (A) · $\frac{1}{6}$ of 144 = 24 (W) · $\frac{2}{8}$ of 92 = 23 (C) · $\frac{4}{8}$ of 74 = 37 (F) · $\frac{2}{6}$ of 75 = 25 (V) · $\frac{1}{3}$ of 24 = 8 (L) · $\frac{1}{4}$ of 36 = 9 (D) · $\frac{2}{8}$ of 64 = 16 (N) · $\frac{2}{8}$ of 140 = 35 (O) · $\frac{4}{8}$ of 26 = 13 (E) · $\frac{1}{6}$ of 108 = 18 (H) · $\frac{1}{3}$ of 36 = 12 (R) · $\frac{1}{10}$ of 170 = 17 (I)

Clue 5 (Division facts (1-12)): surviving statement is box 3 → Elena Storm

$24 \div 2 = 12$ · $44 \div 11 = 4$ · $10 \div 1 = 10$ · $48 \div 6 = 8$ · $63 \div 7 = 9$ · $132 \div 12 = 11$ · $12 \div 12 = 1$ · $56 \div 8 = 7$ · $55 \div 11 = 5$ · $12 \div 2 = 6$ · $20 \div 10 = 2$