



The Sky Bandit of Altus

Grade 7 math · Addition, Multi-step word problems, Word problems, Subtraction, Division · Reading level grades 5-6

Detective: _____ Date: _____

A mysterious rogue pilot has hijacked the Golden Compass from the Sky Academy vault. We must decode the flight logs to find the culprit!

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 pilot is _____

Possible suspects

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

NAME	SKY SKILL	SURVIVAL TOOL	GRIP STYLE	PILOT HAIR STYLE	GROUNDED BY
Indiana Jones	lightning dash	prop repair	left handed	slick black hair	ticklish ankles
Orville Wright	lightning dash	map reading	right handed	slick black hair	ticklish ankles
Amelia Skyhart	lightning dash	prop repair	left handed	slick black hair	scared of heights
Sally Ride	sky grappling	map reading	right handed	messy brown curls	ticklish ankles
Drake Voyage	wind gliding	knot tying	right handed	messy brown curls	ticklish ankles
Freya Stark	cloud stealth	prop repair	right handed	slick black hair	sneezes from pollen
Yuri Gagarin	wind gliding	prop repair	right handed	messy brown curls	ticklish ankles
Marco Polo	sky grappling	knot tying	right handed	slick black hair	ticklish ankles
Jeanne Baret	sky grappling	prop repair	left handed	bright red ponytail	scared of heights
Wilbur Wright	sky grappling	map reading	right handed	slick black hair	scared of heights
Steve Fossett	lightning dash	map reading	left handed	bright red ponytail	scared of heights
Arthur Conan	sky grappling	prop repair	left handed	messy brown curls	ticklish ankles
Lara Croft	lightning dash	prop repair	left handed	bright red ponytail	sneezes from pollen
Guy Bluford	storm brewing	prop repair	left handed	slick black hair	scared of heights
Vasco da Gama	cloud stealth	prop repair	left handed	messy brown curls	ticklish ankles
Hudson Bay	lightning dash	prop repair	right handed	bright red ponytail	ticklish ankles
Valentina Teresh	wind gliding	map reading	right handed	bright red ponytail	sneezes from pollen
Charles Lindy	sky grappling	star tracking	right handed	slick black hair	ticklish ankles
Nellie Bly	cloud stealth	prop repair	right handed	slick black hair	ticklish ankles
Mae Jemison	storm brewing	knot tying	right handed	slick black hair	ticklish ankles
Buzz Aldrin	storm brewing	prop repair	left handed	slick black hair	sneezes from pollen

CLUE 1 Addition

To unlock the dock gate, we must count the active airships. Solve this quick problem to find the bypass code.

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

T 9176	3187	5950	8761	4123	4861	7516	3906	T 9176	7516	5582	5950	6958	4861	5582	T 9176	3172	6958	5950
6958	T 9176	4123	3333	T 9176	3333	4123	3344	9078	3906	4861	3006							

$5388 + 3788 = \square \rightarrow \text{T}$	$2328 + 3622 = \square \rightarrow \text{E}$	$2098 + 1089 = \square \rightarrow \text{H}$
$1697 + 2426 = \square \rightarrow \text{A}$	$985 + 2021 = \square \rightarrow \text{G}$	$5848 + 2913 = \square \rightarrow \text{B}$
$5991 + 3087 = \square \rightarrow \text{K}$	$1659 + 1513 = \square \rightarrow \text{U}$	$2384 + 1522 = \square \rightarrow \text{I}$
$1981 + 1363 = \square \rightarrow \text{C}$	$2152 + 3430 = \square \rightarrow \text{O}$	$2171 + 1162 = \square \rightarrow \text{R}$
$4561 + 2955 = \square \rightarrow \text{D}$	$1688 + 3173 = \square \rightarrow \text{N}$	$3658 + 3300 = \square \rightarrow \text{S}$

Scratch space:

CLUE 2

Multi-step word problems

The airship fuel tank has a slow leak. Solve this multi-step calculation to figure out how much fuel remains before we crash.

Solve each problem, then write its letter in the boxes to fill in the missing word.

A witness saw the villain was R D E D .

58 48 16 43 87 43 21 29

Navigator earned 6 spyglasses in each of 4 rounds, plus 42 bonus spyglasses. Then 8 spyglasses were lost. How many spyglasses are left?

Answer: → R

Navigator earned 8 maps in each of 3 rounds, plus 32 bonus maps. Then 8 maps were lost. How many maps are left?

Answer: → I

There were 181 grappling hooks in all. 9 grappling hooks were set aside. The rest were shared equally among 4 Sky Patrol. How many grappling hooks did each get?

Answer: → H

Navigator filled 7 boxes with 2 grappling hooks each, then found 15 more grappling hooks. How many grappling hooks are there in all?

Answer: → N

Navigator collected 7 propellers in the morning and 73 propellers in the afternoon, then split them equally among 5 Sky Patrol. How many propellers did each get?

Answer: → G

Navigator earned 2 spyglasses in each of 3 rounds, plus 21 bonus spyglasses. Then 6 spyglasses were lost. How many spyglasses are left?

Answer: → A

There were 468 grappling hooks in all. 4 Sky Patrol used 30 grappling hooks each. The other 4 Sky Patrol shared the rest equally. How many grappling hooks did each of the other Sky Patrol get?

Answer: → T

Scratch space:

CLUE 3

Word problems

We found piles of dropped cargo on the lower platform. Let's tally them all up to see if any items are still missing.

Solve each problem, then write its letter in the boxes to fill in the missing word.

Someone scared the villain off with

T

A
N

E

11 22 35 57 39 22 63 34 57 39 63

Navigator found 2 spyglasses yesterday and 9 more today. How many spyglasses in all?

Answer: → T

There were 61 grappling hooks. 27 were used up. How many grappling hooks are left?

Answer: → H

Navigator found 17 grappling hooks yesterday and 22 more today. How many grappling hooks in all?

Answer: → L

There were 95 propellers. 32 were used up. How many propellers are left?

Answer: → S

There were 64 maps. 7 were used up. How many maps are left?

Answer: → K

There were 68 maps. 33 were used up. How many maps are left?

Answer: → C

Navigator lined up 2 rows of 11 maps. How many maps in all?

Answer: → I

Scratch space:

CLUE 4 Subtraction

The emergency battery power is dropping fast. Calculate how much power was lost when the thief cut the power grid wires.

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

S																			
2714	6994	1335	5880	6429	3950	6994	1936	5880	6429	2078	1936	1335	8609	2411	4855	6689	2815	5970	

1335	2815	2096	2078	7927	2078	7927	6994	4222	7927	2096

$$5417 - 2703 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$5541 - 4206 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$7778 - 1808 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$9533 - 3653 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$5538 - 1316 = \boxed{} \rightarrow \boxed{\text{M}}$$

$$6362 - 2412 = \boxed{} \rightarrow \boxed{\text{B}}$$

$$11357 - 4363 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$6499 - 1644 = \boxed{} \rightarrow \boxed{\text{O}}$$

$$4329 - 1918 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$10335 - 2408 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$4086 - 2150 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$2906 - 828 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$8288 - 1599 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$9513 - 904 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$5737 - 2922 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$4094 - 1998 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$9255 - 2826 = \boxed{} \rightarrow \boxed{\text{K}}$$

Scratch space:

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

We have to split our rescue squad evenly into different rescue gliders. Solve this to make sure everyone has a seat.

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:

$55 \div 5 = \boxed{}$

$110 \div 11 = \boxed{}$

$18 \div 9 = \boxed{}$

$7 \div 1 = \boxed{}$

$132 \div 11 = \boxed{}$

$27 \div 3 = \boxed{}$

$28 \div 7 = \boxed{}$

$40 \div 5 = \boxed{}$

$30 \div 10 = \boxed{}$

$42 \div 7 = \boxed{}$

$5 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain brews up a sudden wild rainstorm, then ties a fast knot to secure the stolen gear.
2. The villain dashes like a bolt of lightning, then checks their map to plot an escape route.
3. The villain glides through the gusty winds, then ties a fast knot to secure the stolen gear.
4. The villain dashes like a bolt of lightning, then fires a bright red flare into the night.
5. The villain brews up a sudden wild rainstorm, then looks up to track the North Star.
6. The villain sneaks through the thick storm clouds, then ties a fast knot to secure the stolen gear.
7. The villain grapples up the side of the airship tower, then fires a bright red flare into the night.
8. The villain dashes like a bolt of lightning, then ties a fast knot to secure the stolen gear.
9. The villain glides through the gusty winds, then tightens a loose propeller screw.
10. The villain sneaks through the thick storm clouds, then tightens a loose propeller screw.
11. The villain grapples up the side of the airship tower, then ties a fast knot to secure the stolen gear.
12. The villain glides through the gusty winds, then fires a bright red flare into the night.

Answer Key

The Sky Bandit of Altus

Culprit: Mae Jemison

storm brewing · knot tying · right handed · slick black hair · ticklish ankles

Trail: Start 21 → Clue 1 20 → Clue 2 11 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE BANDIT DOES NOT USE STAR TRACKING"

$5388 + 3788 = 9176$ (T) · $2328 + 3622 = 5950$ (E) · $2098 + 1089 = 3187$ (H) · $1697 + 2426 = 4123$ (A) · $985 + 2021 = 3006$ (G) · $5848 + 2913 = 8761$ (B) · $5991 + 3087 = 9078$ (K) · $1659 + 1513 = 3172$ (U) · $2384 + 1522 = 3906$ (I) · $1981 + 1363 = 3344$ (C) · $2152 + 3430 = 5582$ (O) · $2171 + 1162 = 3333$ (R) · $4561 + 2955 = 7516$ (D) · $1688 + 3173 = 4861$ (N) · $3658 + 3300 = 6958$ (S)

Clue 2 (Multi-step word problems): "RIGHT HANDED"

Navigator earned 6 spyglasses in each of 4 rounds, plus 42 bonus spyglasses. Then 8 spyglasses were lost. How many spyglasses are left? = 58 (R) · Navigator earned 8 maps in each of 3 rounds, plus 32 bonus maps. Then 8 maps were lost. How many maps are left? = 48 (I) · There were 181 grappling hooks in all. 9 grappling hooks were set aside. The rest were shared equally among 4 Sky Patrol. How many grappling hooks did each get? = 43 (H) · Navigator filled 7 boxes with 2 grappling hooks each, then found 15 more grappling hooks. How many grappling hooks are there in all? = 29 (N) · Navigator collected 7 propellers in the morning and 73 propellers in the afternoon, then split them equally among 5 Sky Patrol. How many propellers did each get? = 16 (G) · Navigator earned 2 spyglasses in each of 3 rounds, plus 21 bonus spyglasses. Then 6 spyglasses were lost. How many spyglasses are left? = 21 (A) · There were 468 grappling hooks in all. 4 Sky Patrol used 30 grappling hooks each. The other 4 Sky Patrol shared the rest equally. How many grappling hooks did each of the other Sky Patrol get? = 87 (T)

Clue 3 (Word problems): "TICKLISH ANKLES"

Navigator found 2 spyglasses yesterday and 9 more today. How many spyglasses in all? = 11 (T) · There were 61 grappling hooks. 27 were used up. How many grappling hooks are left? = 34 (H) · Navigator found 17 grappling hooks yesterday and 22 more today. How many grappling hooks in all? = 39 (L) · There were 95 propellers. 32 were used up. How many propellers are left? = 63 (S) · There were 64 maps. 7 were used up. How many maps are left? = 57 (K) · There were 68 maps. 33 were used up. How many maps are left? = 35 (C) · Navigator lined up 2 rows of 11 maps. How many maps in all? = 22 (I)

Clue 4 (Subtraction): "SLICK BLACK HAIR FOUND IN THE HELMET"

$5417 - 2703 = 2714$ (S) · $5541 - 4206 = 1335$ (I) · $7778 - 1808 = 5970$ (D) · $9533 - 3653 = 5880$ (C) · $5538 - 1316 = 4222$ (M) · $6362 - 2412 = 3950$ (B) · $11357 - 4363 = 6994$ (L) · $6499 - 1644 = 4855$ (O) · $4329 - 1918 = 2411$ (F) · $10335 - 2408 = 7927$ (E) · $4086 - 2150 = 1936$ (A) · $2906 - 828 = 2078$ (H) · $8288 - 1599 = 6689$ (U) · $9513 - 904 = 8609$ (R) · $5737 - 2922 = 2815$ (N) · $4094 - 1998 = 2096$ (T) · $9255 - 2826 = 6429$ (K)

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

$55 \div 5 = 11$ · $110 \div 11 = 10$ · $18 \div 9 = 2$ · $7 \div 1 = 7$ · $132 \div 11 = 12$ · $27 \div 3 = 9$ · $28 \div 7 = 4$ · $40 \div 5 = 8$ · $30 \div 10 = 3$ · $42 \div 7 = 6$ · $5 \div 1 = 5$