



The Cloud Runner Heist

Grade 6 math · Multiplication, Skip counting, Place value, Percentages, Division · Reading level grades 7-9

Detective: _____ Date: _____

A priceless sky-crystal was snatched from the bridge of the Leviathan during a thick bank of cloud cover. Analyze flight logs and radar prints to unmask the rogue aviator before the ship docks!

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 Aviator is _____

Possible suspects

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

NAME	PRIMARY GEAR	SECONDARY TOOL	STANCE	GOGGLE TINT	SYSTEM VULNERABILITY
Harriet Quimby	Jet Boots	Smoke Bomb	Left-Handed Grip	Copper Amber Tint	Overheats in Steam
Roscoe Turner	Grapple Launcher	Signal Jammer	Left-Handed Grip	Cobalt Blue Tint	Overheats in Steam
Chuck Yeager	Pulse Beacon	Smoke Bomb	Left-Handed Grip	Copper Amber Tint	Shorts Out in Rain
Charles Lindbergh	Jet Boots	Flash Flare	Left-Handed Grip	Cobalt Blue Tint	Overheats in Steam
Louis Bleriot	Steam Cannon	Wire Cutters	Left-Handed Grip	Cobalt Blue Tint	Overheats in Steam
Will Rogers	Steam Cannon	Signal Jammer	Left-Handed Grip	Copper Amber Tint	Fails in High Wind
James Doolittle	Grapple Launcher	Flash Flare	Right-Handed Grip	Cobalt Blue Tint	Fails in High Wind
Orville Wright	Steam Cannon	Wire Cutters	Right-Handed Grip	Emerald Green Tint	Fails in High Wind
Fiorello La Guardia	Steam Cannon	Signal Jammer	Right-Handed Grip	Copper Amber Tint	Fails in High Wind
Howard Hughes	Steam Cannon	Decoy Drone	Right-Handed Grip	Cobalt Blue Tint	Shorts Out in Rain
Ruth Law	Jet Boots	Signal Jammer	Right-Handed Grip	Cobalt Blue Tint	Shorts Out in Rain
Jacqueline Cochran	Grapple Launcher	Decoy Drone	Right-Handed Grip	Copper Amber Tint	Shorts Out in Rain
Alberto Santos	Steam Cannon	Flash Flare	Left-Handed Grip	Cobalt Blue Tint	Shorts Out in Rain
Elinor Smith	Jet Boots	Decoy Drone	Right-Handed Grip	Cobalt Blue Tint	Overheats in Steam
Pancho Barnes	Glider Wings	Flash Flare	Right-Handed Grip	Cobalt Blue Tint	Overheats in Steam
Otto Lilienthal	Grapple Launcher	Decoy Drone	Left-Handed Grip	Copper Amber Tint	Overheats in Steam
Wiley Post	Glider Wings	Signal Jammer	Left-Handed Grip	Cobalt Blue Tint	Overheats in Steam
Manfred Richthofen	Grapple Launcher	Decoy Drone	Left-Handed Grip	Cobalt Blue Tint	Overheats in Steam
Amelia Earhart	Pulse Beacon	Wire Cutters	Right-Handed Grip	Cobalt Blue Tint	Fails in High Wind
Wilbur Wright	Glider Wings	Flash Flare	Right-Handed Grip	Copper Amber Tint	Overheats in Steam
Antoine Exupery	Glider Wings	Decoy Drone	Left-Handed Grip	Emerald Green Tint	Fails in High Wind

CLUE 1
Multiplication facts (1-12)

To decode the security log, compute the total weight of crates stacked across identical storage bays.

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

T									T							T
21	6	3	63	27	63	32	3	80	21	144	49	3	63	30	49	21

										T	T				
80	48	22	22	42	44	54	22	3	80	27	21	21	3	22	63

$3 \times 7 = \square \rightarrow \text{**T**}$

$12 \times 12 = \square \rightarrow \text{**D**}$

$9 \times 7 = \square \rightarrow \text{**S**}$

$6 \times 8 = \square \rightarrow \text{**A**}$

$8 \times 4 = \square \rightarrow \text{**P**}$

$1 \times 3 = \square \rightarrow \text{**E**}$

$4 \times 11 = \square \rightarrow \text{**W**}$

$7 \times 6 = \square \rightarrow \text{**Y**}$

$8 \times 10 = \square \rightarrow \text{**C**}$

$11 \times 2 = \square \rightarrow \text{**R**}$

$9 \times 6 = \square \rightarrow \text{**I**}$

$5 \times 6 = \square \rightarrow \text{**N**}$

$7 \times 7 = \square \rightarrow \text{**O**}$

$3 \times 2 = \square \rightarrow \text{**H**}$

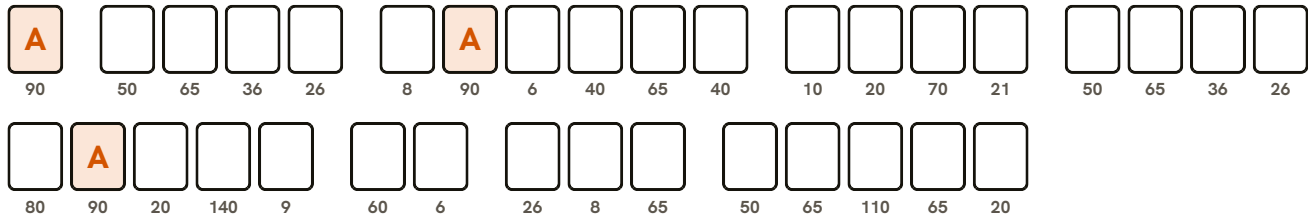
$9 \times 3 = \square \rightarrow \text{**U**}$

Scratch space:

CLUE 2 Skip counting

The airship radar ticks at steady elevation intervals, revealing a pattern in the altitude tracking log.

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



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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 → **P**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 → **M**

Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 → **H**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 → **F**

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

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

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 → **D**

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 → **K**

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 → **E**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 → **V**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, __, 70, 80 → **O**

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

Scratch space:

CLUE 3
Place value

A locked flight console requires isolating specific digit places from a scrambled six-digit registry code.

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

T												
60	2000	8000	8000	40	90	80	9000	8000	10	800	100	

							T								
900	700	8000	10	2000	8000	80	60	40	800	5000	40	60	8000	80	400

What is the value of the 6 in 547,360? → **T**

What is the value of the 8 in 18,790? → **E**

What is the value of the 9 in 66,097? → **C**

What is the value of the 1 in 42,310? → **R**

What is the value of the 8 in 414,189? → **A**

What is the value of the 9 in 337,906? → **O**

What is the value of the 8 in 36,854? → **I**

What is the value of the 2 in 892,353? → **H**

What is the value of the 1 in 62,136? → **G**

What is the value of the 9 in 89,805? → **P**

What is the value of the 5 in 125,844? → **N**

What is the value of the 7 in 220,710? → **V**

What is the value of the 4 in 55,247? → **S**

What is the value of the 4 in 729,433? → **M**

Scratch space:

CLUE 4 Percentages

Engine telemetry records show the exact percentage of power remaining in the auxiliary thrusters.

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

W												W							
28	8	6	38	1	16	16	1	16	16	3	28	3	18	42	22	3	30	6	

22	30	17	1	6	8	38	6

$10\% \text{ of } 280 = \square \rightarrow \boxed{\text{W}}$

$25\% \text{ of } 72 = \square \rightarrow \boxed{\text{C}}$

$75\% \text{ of } 40 = \square \rightarrow \boxed{\text{L}}$

$5\% \text{ of } 840 = \square \rightarrow \boxed{\text{O}}$

$60\% \text{ of } 5 = \square \rightarrow \boxed{\text{A}}$

$10\% \text{ of } 170 = \square \rightarrow \boxed{\text{U}}$

$50\% \text{ of } 12 = \square \rightarrow \boxed{\text{T}}$

$50\% \text{ of } 44 = \square \rightarrow \boxed{\text{B}}$

$25\% \text{ of } 32 = \square \rightarrow \boxed{\text{I}}$

$25\% \text{ of } 152 = \square \rightarrow \boxed{\text{N}}$

$50\% \text{ of } 2 = \square \rightarrow \boxed{\text{E}}$

$10\% \text{ of } 160 = \square \rightarrow \boxed{\text{S}}$

Scratch space:

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

The crew needs to divide the remaining emergency fuel canisters equally among the maneuvering jets.

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:

$20 \div 4 = \boxed{}$

$96 \div 8 = \boxed{}$

$8 \div 4 = \boxed{}$

$9 \div 3 = \boxed{}$

$88 \div 8 = \boxed{}$

$72 \div 12 = \boxed{}$

$32 \div 4 = \boxed{}$

$28 \div 4 = \boxed{}$

$99 \div 11 = \boxed{}$

$4 \div 4 = \boxed{}$

$10 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain activated a pulse beacon, then triggered a signal jammer.
2. The villain fired a grapple launcher, then triggered a signal jammer.
3. The villain activated a pulse beacon, then released a decoy drone.
4. The villain fired a grapple launcher, then released a decoy drone.
5. The villain deployed glider wings, then triggered a signal jammer.
6. The villain activated a pulse beacon, then launched a flash flare.
7. The villain fired a grapple launcher, then dropped a smoke bomb.
8. The villain blasted a steam cannon, then dropped a smoke bomb.
9. The villain fired a grapple launcher, then launched a flash flare.
10. The villain ignited jet boots, then dropped a smoke bomb.
11. The villain deployed glider wings, then launched a flash flare.
12. The villain ignited jet boots, then launched a flash flare.

Answer Key

The Cloud Runner Heist

Culprit: Manfred Richthofen

Grapple Launcher · Decoy Drone · Left-Handed Grip · Cobalt Blue Tint · Overheats in Steam

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE SUSPECT DOES NOT CARRY WIRE CUTTERS"

$3 \times 7 = 21$ (T) · $12 \times 12 = 144$ (D) · $9 \times 7 = 63$ (S) · $6 \times 8 = 48$ (A) · $8 \times 4 = 32$ (P) · $1 \times 3 = 3$ (E) · $4 \times 11 = 44$ (W) · $7 \times 6 = 42$ (Y) · $8 \times 10 = 80$ (C) · $11 \times 2 = 22$ (R) · $9 \times 6 = 54$ (I) · $5 \times 6 = 30$ (N) · $7 \times 7 = 49$ (O) · $3 \times 2 = 6$ (H) · $9 \times 3 = 27$ (U)

Clue 2 (Skip counting): "A LEFT HANDED GRIP LEFT MARKS ON THE LEVER"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 = 21 (P) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (M) · Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 = 8 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (F) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 = 20 (R) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, __, 80, 90 = 70 (I) · Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 = 9 (S) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (G) · Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 = 40 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (K) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (N) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (E) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (V) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, __, 70, 80 = 60 (O) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, __, 60, 70 = 50 (L)

Clue 3 (Place value): "THE ESCAPE RIG OVERHEATS IN STEAM"

What is the value of the 6 in 547,360? = 60 (T) · What is the value of the 8 in 18,790? = 8000 (E) · What is the value of the 9 in 66,097? = 90 (C) · What is the value of the 1 in 42,310? = 10 (R) · What is the value of the 8 in 414,189? = 80 (A) · What is the value of the 9 in 337,906? = 900 (O) · What is the value of the 8 in 36,854? = 800 (I) · What is the value of the 2 in 892,353? = 2000 (H) · What is the value of the 1 in 62,136? = 100 (G) · What is the value of the 9 in 89,805? = 9000 (P) · What is the value of the 5 in 125,844? = 5000 (N) · What is the value of the 7 in 220,710? = 700 (V) · What is the value of the 4 in 55,247? = 40 (S) · What is the value of the 4 in 729,433? = 400 (M)

Clue 4 (Percentages): "WITNESSES SAW A COBALT BLUE TINT"

10% of 280 = 28 (W) · 25% of 72 = 18 (C) · 75% of 40 = 30 (L) · 5% of 840 = 42 (O) · 60% of 5 = 3 (A) · 10% of 170 = 17 (U) · 50% of 12 = 6 (T) · 50% of 44 = 22 (B) · 25% of 32 = 8 (I) · 25% of 152 = 38 (N) · 50% of 2 = 1 (E) · 10% of 160 = 16 (S)

Clue 5 (Division facts (1-12)): surviving statement is box 4 → Manfred Richthofen

$20 \div 4 = 5$ · $96 \div 8 = 12$ · $8 \div 4 = 2$ · $9 \div 3 = 3$ · $88 \div 8 = 11$ · $72 \div 12 = 6$ · $32 \div 4 = 8$ · $28 \div 4 = 7$ · $99 \div 11 = 9$ · $4 \div 4 = 1$ · $10 \div 1 = 10$