



The Great Plane Crazy Sky Heist

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

Detective: _____ **Date:** _____

An anonymous Rogue Aviator has stolen the ultra-rare Golden Propeller Block right off the Chief Aerospace Engineer's showcase build! The suspect escaped in a custom-built aircraft. We must track down the build plans, piece together the flight data, and 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 Aviator is _____

Possible suspects

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

NAME	PROPULSION SYSTEM	WING GEAR	FLIGHT CONTROL STYLE	AVATAR HAIR STYLE	SYSTEM VULNERABILITY
TurboTinkerer	Plasma Hover Pads	Solar Panel Wings	Keyboard Steering	Blue Spiky Hair	Anchor Block Glitches
MaxThrust	Propeller Biplane Wings	Smoke Trail Generators	Mouse Steering	Blue Spiky Hair	Water Hazards
PropellerPete	Plasma Hover Pads	Piston Slider Joints	Mouse Steering	Blue Spiky Hair	Water Hazards
JetstreamJack	Supersonic Jet Engines	Piston Slider Joints	Mouse Steering	Blocky Black Hair	Anchor Block Glitches
VectorVince	Propeller Biplane Wings	Smoke Trail Generators	Keyboard Steering	Blue Spiky Hair	Anchor Block Glitches
AerospaceAce	Plasma Hover Pads	Solar Panel Wings	Mouse Steering	Bacon Hair	Anchor Block Glitches
RickTheBuilder	Supersonic Jet Engines	TNT Block Cannons	Mouse Steering	Blocky Black Hair	Anchor Block Glitches
MachSpeedMolly	Supersonic Jet Engines	Magnetic Harpoon Launchers	Keyboard Steering	Blocky Black Hair	Anchor Block Glitches
SonicSallie	Helicopter Rotor Blades	Piston Slider Joints	Mouse Steering	Blue Spiky Hair	Anchor Block Glitches
CargoCarla	Heavy Rocket Boosters	Smoke Trail Generators	Mouse Steering	Blocky Black Hair	Anchor Block Glitches
DeltaWingPro	Helicopter Rotor Blades	TNT Block Cannons	Mouse Steering	Blocky Black Hair	Anchor Block Glitches
GearsGary	Supersonic Jet Engines	Smoke Trail Generators	Mouse Steering	Bacon Hair	Anchor Block Glitches
RoboRotor	Heavy Rocket Boosters	Solar Panel Wings	Mouse Steering	Blocky Black Hair	Build Zone Boundaries
MatrixMia	Propeller Biplane Wings	Solar Panel Wings	Mouse Steering	Blue Spiky Hair	Anchor Block Glitches
GyroGaby	Supersonic Jet Engines	Smoke Trail Generators	Mouse Steering	Blocky Black Hair	Water Hazards
SkyCaptainSam	Propeller Biplane Wings	Smoke Trail Generators	Keyboard Steering	Blue Spiky Hair	Build Zone Boundaries
VelocityVal	Helicopter Rotor Blades	Smoke Trail Generators	Keyboard Steering	Blocky Black Hair	Anchor Block Glitches
AltitudeAl	Supersonic Jet Engines	Piston Slider Joints	Mouse Steering	Blue Spiky Hair	Anchor Block Glitches
RocketRex	Supersonic Jet Engines	Smoke Trail Generators	Keyboard Steering	Blocky Black Hair	Anchor Block Glitches
NoobPilot	Propeller Biplane Wings	Smoke Trail Generators	Mouse Steering	Blue Spiky Hair	Anchor Block Glitches
WrenchWendy	Heavy Rocket Boosters	Piston Slider Joints	Mouse Steering	Blue Spiky Hair	Anchor Block Glitches

CLUE 1 Addition

We found the scrap pile where the rogue pilot welded their aircraft. To estimate the ship's weight, we must add the counts of all the titanium beams and steel blocks left behind.

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

T						T										T	
5438	4734	8394	4027	9452	6688	9241	5438	8394	3553	6913	4324	9241	8394	4027	3663	9241	5438
3553	4027	8394	4027	9241	3700	9452	6913	8361	9452	3663	8394	3700	8678	7778	3663	4586	4027

$1712 + 3726 = \square \rightarrow$ T	$2066 + 1487 = \square \rightarrow$ U	$2808 + 4970 = \square \rightarrow$ I
$1904 + 1759 = \square \rightarrow$ N	$2398 + 1629 = \square \rightarrow$ S	$3733 + 5508 = \square \rightarrow$ O
$2896 + 4017 = \square \rightarrow$ R	$5401 + 4051 = \square \rightarrow$ A	$1500 + 3086 = \square \rightarrow$ G
$4575 + 2113 = \square \rightarrow$ B	$1560 + 2140 = \square \rightarrow$ L	$2534 + 5860 = \square \rightarrow$ E
$1912 + 2822 = \square \rightarrow$ H	$4550 + 4128 = \square \rightarrow$ W	$2797 + 1527 = \square \rightarrow$ D
$2834 + 5527 = \square \rightarrow$ P		

Scratch space:

CLUE 2
Fractions of a number

The flight radar log shows only a fraction of the flight path before the signal jammed. We have to calculate that exact fraction of the total grid distance to unlock the next coordinates.

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

T								T											
21	30	29	4	38	9	16	21	12	15	29	15	33	16	12	15	29			

	T						
15	21	29	29	8	38	28	34

$4/8 \text{ of } 42 = \square \rightarrow \boxed{\text{T}}$

$4/6 \text{ of } 51 = \square \rightarrow \boxed{\text{G}}$

$2/10 \text{ of } 190 = \square \rightarrow \boxed{\text{I}}$

$2/8 \text{ of } 32 = \square \rightarrow \boxed{\text{R}}$

$1/6 \text{ of } 174 = \square \rightarrow \boxed{\text{E}}$

$8/10 \text{ of } 5 = \square \rightarrow \boxed{\text{P}}$

$3/8 \text{ of } 40 = \square \rightarrow \boxed{\text{S}}$

$2/4 \text{ of } 18 = \square \rightarrow \boxed{\text{L}}$

$6/8 \text{ of } 40 = \square \rightarrow \boxed{\text{H}}$

$2/10 \text{ of } 60 = \square \rightarrow \boxed{\text{U}}$

$4/8 \text{ of } 32 = \square \rightarrow \boxed{\text{O}}$

$3/5 \text{ of } 55 = \square \rightarrow \boxed{\text{M}}$

$2/10 \text{ of } 140 = \square \rightarrow \boxed{\text{N}}$

Scratch space:

CLUE 3
Order of operations

The autopilot flight computer was locked with a custom startup sequence. We must solve the operations in the exact standard order to bypass the security lock.

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

T																		
18	76	38	7	8	63	79	75	63	53	70	8	63	68	38	75	7	14	

									T					
45	68	72	76	31	70	58	79	63	18	72	76	38	53	

$4 \times 11 - 26 = \square \rightarrow \boxed{\text{T}}$

$9 \times 3 - 19 = \square \rightarrow \boxed{\text{U}}$

$29 + 2 \times 8 = \square \rightarrow \boxed{\text{A}}$

$7 \times 11 - 2 = \square \rightarrow \boxed{\text{D}}$

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

$11 \times 6 - 13 = \square \rightarrow \boxed{\text{S}}$

$7 \times 5 - 21 = \square \rightarrow \boxed{\text{Y}}$

$5 \times 9 - 14 = \square \rightarrow \boxed{\text{O}}$

$33 + 7 \times 5 = \square \rightarrow \boxed{\text{N}}$

$15 + 6 \times 8 = \square \rightarrow \boxed{\text{I}}$

$42 + 7 \times 4 = \square \rightarrow \boxed{\text{R}}$

$12 \times 8 - 20 = \square \rightarrow \boxed{\text{H}}$

$11 \times 8 - 30 = \square \rightarrow \boxed{\text{G}}$

$18 + 5 \times 4 = \square \rightarrow \boxed{\text{E}}$

$65 + 7 \times 2 = \square \rightarrow \boxed{\text{L}}$

$9 \times 4 - 29 = \square \rightarrow \boxed{\text{B}}$

Scratch space:

CLUE 4
Multiplication facts (1-12)

The hangar floor has a grid of thruster parts organized in equal rows. By multiplying the rows of engines, we can calculate how much thrust power the suspect packed.

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

B																	
121	80	12	9	88	56	40	1	90	5	110	40	60	84	80	40	56	88
									B								
54	9	60	9	80	9	49	20	121	9	5	40	2	120				

$11 \times 11 = \square \rightarrow \text{B}$

$8 \times 5 = \square \rightarrow \text{I}$

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

$5 \times 1 = \square \rightarrow \text{H}$

$6 \times 10 = \square \rightarrow \text{R}$

$7 \times 8 = \square \rightarrow \text{P}$

$10 \times 12 = \square \rightarrow \text{D}$

$4 \times 5 = \square \rightarrow \text{T}$

$8 \times 11 = \square \rightarrow \text{S}$

$1 \times 9 = \square \rightarrow \text{E}$

$10 \times 8 = \square \rightarrow \text{L}$

$1 \times 2 = \square \rightarrow \text{N}$

$11 \times 10 = \square \rightarrow \text{A}$

$10 \times 9 = \square \rightarrow \text{Y}$

$1 \times 1 = \square \rightarrow \text{K}$

$1 \times 12 = \square \rightarrow \text{U}$

$9 \times 6 = \square \rightarrow \text{W}$

$7 \times 12 = \square \rightarrow \text{C}$

Scratch space:

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

We discovered a cargo container filled with spare block parts. If we divide these blocks equally among the suspect's landing gears, we can figure out the balanced weight distribution.

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:

$80 \div 10 = \boxed{}$

$3 \div 1 = \boxed{}$

$30 \div 5 = \boxed{}$

$28 \div 7 = \boxed{}$

$132 \div 12 = \boxed{}$

$99 \div 11 = \boxed{}$

$42 \div 6 = \boxed{}$

$9 \div 9 = \boxed{}$

$60 \div 12 = \boxed{}$

$4 \div 2 = \boxed{}$

$20 \div 2 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain glides gently with propeller biplane wings, then charges batteries with solar panel wings.
2. The villain floats silently on plasma hover pads, then drops heavy TNT block cannons.
3. The villain lifts off using helicopter rotor blades, then extends wings using piston slider joints.
4. The villain screams into orbit with heavy rocket boosters, then charges batteries with solar panel wings.
5. The villain glides gently with propeller biplane wings, then drops heavy TNT block cannons.
6. The villain blasts off with supersonic jet engines, then extends wings using piston slider joints.
7. The villain blasts off with supersonic jet engines, then drops heavy TNT block cannons.
8. The villain glides gently with propeller biplane wings, then paints the sky with smoke trail generators.
9. The villain lifts off using helicopter rotor blades, then paints the sky with smoke trail generators.
10. The villain floats silently on plasma hover pads, then grabs cargo using magnetic harpoon launchers.
11. The villain blasts off with supersonic jet engines, then paints the sky with smoke trail generators.
12. The villain screams into orbit with heavy rocket boosters, then extends wings using piston slider joints.

Answer Key

The Great Plane Crazy Sky Heist

Culprit: WrenchWendy

Heavy Rocket Boosters · Piston Slider Joints · Mouse Steering · Blue Spiky Hair · Anchor Block Glitches

Trail: Start 21 → Clue 1 17 → Clue 2 12 → Clue 3 9 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SABOTEUR DOES NOT USE SOLAR PANEL WINGS"

$1712 + 3726 = 5438$ (T) · $2066 + 1487 = 3553$ (U) · $2808 + 4970 = 7778$ (I) · $1904 + 1759 = 3663$ (N) · $2398 + 1629 = 4027$ (S) · $3733 + 5508 = 9241$ (O) · $2896 + 4017 = 6913$ (R) · $5401 + 4051 = 9452$ (A) · $1500 + 3086 = 4586$ (G) · $4575 + 2113 = 6688$ (B) · $1560 + 2140 = 3700$ (L) · $2534 + 5860 = 8394$ (E) · $1912 + 2822 = 4734$ (H) · $4550 + 4128 = 8678$ (W) · $2797 + 1527 = 4324$ (D) · $2834 + 5527 = 8361$ (P)

Clue 2 (Fractions of a number): "THE PILOT USES MOUSE STEERING"

$4/8$ of 42 = 21 (T) · $4/6$ of 51 = 34 (G) · $2/10$ of 190 = 38 (I) · $2/8$ of 32 = 8 (R) · $1/6$ of 174 = 29 (E) · $8/10$ of 5 = 4 (P) · $3/8$ of 40 = 15 (S) · $2/4$ of 18 = 9 (L) · $6/8$ of 40 = 30 (H) · $2/10$ of 60 = 12 (U) · $4/8$ of 32 = 16 (O) · $3/5$ of 55 = 33 (M) · $2/10$ of 140 = 28 (N)

Clue 3 (Order of operations): "THE BUILD IS RUINED BY ANCHOR GLITCHES"

$4 \times 11 - 26 = 18$ (T) · $9 \times 3 - 19 = 8$ (U) · $29 + 2 \times 8 = 45$ (A) · $7 \times 11 - 2 = 75$ (D) · $8 \times 10 - 8 = 72$ (C) · $11 \times 6 - 13 = 53$ (S) · $7 \times 5 - 21 = 14$ (Y) · $5 \times 9 - 14 = 31$ (O) · $33 + 7 \times 5 = 68$ (N) · $15 + 6 \times 8 = 63$ (I) · $42 + 7 \times 4 = 70$ (R) · $12 \times 8 - 20 = 76$ (H) · $11 \times 8 - 30 = 58$ (G) · $18 + 5 \times 4 = 38$ (E) · $65 + 7 \times 2 = 79$ (L) · $9 \times 4 - 29 = 7$ (B)

Clue 4 (Multiplication facts (1-12)): "BLUE SPIKY HAIR CLIPS WERE LEFT BEHIND"

$11 \times 11 = 121$ (B) · $8 \times 5 = 40$ (I) · $7 \times 7 = 49$ (F) · $5 \times 1 = 5$ (H) · $6 \times 10 = 60$ (R) · $7 \times 8 = 56$ (P) · $10 \times 12 = 120$ (D) · $4 \times 5 = 20$ (T) · $8 \times 11 = 88$ (S) · $1 \times 9 = 9$ (E) · $10 \times 8 = 80$ (L) · $1 \times 2 = 2$ (N) · $11 \times 10 = 110$ (A) · $10 \times 9 = 90$ (Y) · $1 \times 1 = 1$ (K) · $1 \times 12 = 12$ (U) · $9 \times 6 = 54$ (W) · $7 \times 12 = 84$ (C)

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

$80 \div 10 = 8$ · $3 \div 1 = 3$ · $30 \div 5 = 6$ · $28 \div 7 = 4$ · $132 \div 12 = 11$ · $99 \div 11 = 9$ · $42 \div 6 = 7$ · $9 \div 9 = 1$ · $60 \div 12 = 5$ · $4 \div 2 = 2$ · $20 \div 2 = 10$