



The Tokyo Bay Titan Emergency

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

Detective: _____ Date: _____

A rogue pilot has slipped into the high-tech military hangar and stolen the experimental Titan-Lure transmitter! If they activate it, a giant sea monster sleeping deep under Tokyo Bay will wake up. You must scan the clues and track down the culprit before the monster rises.

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	MECH SUIT TYPE	STOLEN WEAPON	COCKPIT HABIT	FOUND HAIR EVIDENCE	WEAPON VULNERABILITY
Yuji Shinoda	Mark Five Striker	Bio Poison Dart	Right-handed controls	Short silver hair	Extreme heat pulse
Dr Hayashida	Laser Cannon Titan	Atomic Heat Ray	Left-handed controls	Long brown hair	High frequency sonar
Pilot Ren	Laser Cannon Titan	Atomic Heat Ray	Right-handed controls	Spiky black hair	Extreme heat pulse
Officer Tanaka	Heavy Shield Tank	EMP Disruptor	Right-handed controls	Spiky black hair	Liquid nitrogen spray
Captain Sato	Giga Drill Jaeger	EMP Disruptor	Left-handed controls	Spiky black hair	Extreme heat pulse
Dr Yamane	Giga Drill Jaeger	Atomic Heat Ray	Left-handed controls	Spiky black hair	High frequency sonar
Dr Miyajima	Giga Drill Jaeger	Freeze Ray Blaster	Left-handed controls	Short silver hair	High frequency sonar
Dr Shiragami	Heavy Shield Tank	Gravity Beam Rifle	Right-handed controls	Spiky black hair	High frequency sonar
Pilot Miki	Mark Five Striker	Bio Poison Dart	Left-handed controls	Spiky black hair	High frequency sonar
Yui Tatara	Heavy Shield Tank	Bio Poison Dart	Left-handed controls	Spiky black hair	High frequency sonar
Dr Kirishima	Mark Five Striker	Freeze Ray Blaster	Left-handed controls	Spiky black hair	High frequency sonar
Shinichi Chujo	Sonic Jet Alpha	EMP Disruptor	Left-handed controls	Short silver hair	High frequency sonar
Dr Matsumiya	Sonic Jet Alpha	EMP Disruptor	Right-handed controls	Long brown hair	Extreme heat pulse
Kenji Noguchi	Mark Five Striker	Bio Poison Dart	Left-handed controls	Short silver hair	High frequency sonar
Major Hicks	Sonic Jet Alpha	Freeze Ray Blaster	Left-handed controls	Long brown hair	Liquid nitrogen spray
Pilot Katsura	Laser Cannon Titan	Gravity Beam Rifle	Left-handed controls	Spiky black hair	High frequency sonar
Captain Gordon	Sonic Jet Alpha	EMP Disruptor	Left-handed controls	Spiky black hair	Liquid nitrogen spray
Goro Ibuki	Giga Drill Jaeger	EMP Disruptor	Left-handed controls	Long brown hair	Extreme heat pulse
Captain Yuri	Laser Cannon Titan	Gravity Beam Rifle	Right-handed controls	Spiky black hair	Extreme heat pulse
Dr Kyohei	Mark Five Striker	Bio Poison Dart	Left-handed controls	Spiky black hair	Liquid nitrogen spray
Professor Ishiro	Laser Cannon Titan	Gravity Beam Rifle	Left-handed controls	Spiky black hair	Liquid nitrogen spray

CLUE 1

Multiplication facts (1-12)

Our scouts found rows of shipping containers knocked over by the escaping mech suit. If there are several neat rows of crates, we can multiply them to find the total damage.

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

T							T							T			
144	56	66	7	5	60	33	144	25	33	66	120	40	33	144	63	120	66
T														T			
144	56	66	8	22	66	66	100	66	22	15	45	2	60	15	120	144	66

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

$12 \times 10 = \square \rightarrow \boxed{\text{S}}$

$5 \times 3 = \square \rightarrow \boxed{\text{A}}$

$8 \times 7 = \square \rightarrow \boxed{\text{H}}$

$4 \times 2 = \square \rightarrow \boxed{\text{F}}$

$12 \times 5 = \square \rightarrow \boxed{\text{L}}$

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

$6 \times 11 = \square \rightarrow \boxed{\text{E}}$

$10 \times 10 = \square \rightarrow \boxed{\text{Z}}$

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

$1 \times 5 = \square \rightarrow \boxed{\text{I}}$

$1 \times 7 = \square \rightarrow \boxed{\text{P}}$

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

$5 \times 5 = \square \rightarrow \boxed{\text{D}}$

$5 \times 8 = \square \rightarrow \boxed{\text{N}}$

$11 \times 3 = \square \rightarrow \boxed{\text{O}}$

$7 \times 9 = \square \rightarrow \boxed{\text{U}}$

Scratch space:

CLUE 2

Fractions of a number

The thief drained power from our backup battery bank to jumpstart their heavy gear. Our screen shows that only a fraction of the total power cells are still fully charged.

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

T																				
5	40	9	7	2	7	12	24	29	5	22	29	21	27	6	14	9	11	9		
6	16	21	6	40	9	22	2	34	5	40	9	27	9	36	5					

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

$$7/8 \text{ of } 24 = \square \rightarrow \boxed{\text{A}}$$

$$3/6 \text{ of } 22 = \square \rightarrow \boxed{\text{R}}$$

$$2/5 \text{ of } 40 = \square \rightarrow \boxed{\text{M}}$$

$$1/10 \text{ of } 90 = \square \rightarrow \boxed{\text{E}}$$

$$2/5 \text{ of } 90 = \square \rightarrow \boxed{\text{F}}$$

$$6/8 \text{ of } 36 = \square \rightarrow \boxed{\text{L}}$$

$$2/5 \text{ of } 100 = \square \rightarrow \boxed{\text{H}}$$

$$1/6 \text{ of } 12 = \square \rightarrow \boxed{\text{O}}$$

$$1/6 \text{ of } 144 = \square \rightarrow \boxed{\text{P}}$$

$$2/5 \text{ of } 55 = \square \rightarrow \boxed{\text{D}}$$

$$2/5 \text{ of } 35 = \square \rightarrow \boxed{\text{W}}$$

$$4/8 \text{ of } 58 = \square \rightarrow \boxed{\text{I}}$$

$$2/8 \text{ of } 28 = \square \rightarrow \boxed{\text{C}}$$

$$1/3 \text{ of } 36 = \square \rightarrow \boxed{\text{K}}$$

$$1/3 \text{ of } 18 = \square \rightarrow \boxed{\text{S}}$$

$$2/8 \text{ of } 136 = \square \rightarrow \boxed{\text{N}}$$

Scratch space:

CLUE 3

Order of operations

To crack the locked flight log of the stolen vehicle, we must run a complex command line. Solving this multi-step equation using the proper order of operations will reveal the flight path.

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

S			S			S										
79	9	61	79	52	76	79	56	9	49	9	32	49	9	56		
							S									
9	54	49	76	9	35	9	79	52	61	18	76					
		S		S												
76	9	79	62	79	49	18	61	32	9							

$23 + 7 \times 8 = \square \rightarrow \boxed{\text{S}}$

$4 \times 11 - 12 = \square \rightarrow \boxed{\text{C}}$

$64 + 3 \times 4 = \square \rightarrow \boxed{\text{R}}$

$8 \times 6 - 13 = \square \rightarrow \boxed{\text{M}}$

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

$21 + 5 \times 8 = \square \rightarrow \boxed{\text{N}}$

$11 \times 7 - 15 = \square \rightarrow \boxed{\text{I}}$

$6 \times 6 - 18 = \square \rightarrow \boxed{\text{A}}$

$12 \times 6 - 20 = \square \rightarrow \boxed{\text{O}}$

$3 + 3 \times 2 = \square \rightarrow \boxed{\text{E}}$

$34 + 3 \times 5 = \square \rightarrow \boxed{\text{T}}$

$10 \times 6 - 4 = \square \rightarrow \boxed{\text{D}}$

Scratch space:

CLUE 4 Rounding

The long-range radar is glitching and cannot give an exact weight for the getaway craft. The screen only displays the estimated weight rounded to the nearest thousand tons.

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

W																
50	7000	1700	90	110	70	20	430	2000	9000	3000	500	290	5000	900	4300	3000
430	370	2900	900	70	20	430	9000	70	370	230	7000	430	7000	900	370	

Round 50 to the nearest ten → **W**

Round 940 to the nearest hundred → **A**

Round 86 to the nearest ten → **O**

Round 2,944 to the nearest hundred → **R**

Round 108 to the nearest ten → **U**

Round 70 to the nearest ten → **N**

Round 18 to the nearest ten → **D**

Round 373 to the nearest ten → **T**

Round 2,070 to the nearest thousand → **P**

Round 8,949 to the nearest thousand → **I**

Round 230 to the nearest ten → **H**

Round 521 to the nearest hundred → **Y**

Round 5,422 to the nearest thousand → **L**

Round 7,338 to the nearest thousand → **E**

Round 4,349 to the nearest hundred → **C**

Round 1,736 to the nearest hundred → **F**

Round 2,799 to the nearest thousand → **K**

Round 426 to the nearest ten → **S**

Round 287 to the nearest ten → **B**

Scratch space:

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

We need to distribute the remaining energy shields equally among our shoreline defense towers. Dividing the total shield units by the number of active towers will keep Tokyo safe.

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:

$84 \div 7 = \boxed{}$

$56 \div 8 = \boxed{}$

$5 \div 1 = \boxed{}$

$70 \div 7 = \boxed{}$

$40 \div 10 = \boxed{}$

$56 \div 7 = \boxed{}$

$14 \div 7 = \boxed{}$

$81 \div 9 = \boxed{}$

$33 \div 3 = \boxed{}$

$3 \div 1 = \boxed{}$

$42 \div 7 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain steals the mech keycard, then races toward the shoreline.
2. The villain disables the security grid, then races toward the shoreline.
3. The villain overloads the reactor shield, then speeds off in an armored jeep.
4. The villain hacks the tracking radar, then escapes in a stealth sub.
5. The villain overloads the reactor shield, then races toward the shoreline.
6. The villain disables the security grid, then flees into the foggy bay.
7. The villain bypasses the titanium vault, then leaps onto the launch pad.
8. The villain bypasses the titanium vault, then races toward the shoreline.
9. The villain disables the security grid, then speeds off in an armored jeep.
10. The villain steals the mech keycard, then flees into the foggy bay.
11. The villain steals the mech keycard, then leaps onto the launch pad.
12. The villain disables the security grid, then escapes in a stealth sub.

Answer Key

The Tokyo Bay Titan Emergency

Culprit: Pilot Miki

Mark Five Striker · Bio Poison Dart · Left-handed controls · Spiky black hair · High frequency sonar

Trail: Start 21 → Clue 1 18 → Clue 2 12 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE PILOT DOES NOT USE THE FREEZE RAY BLASTER"

$12 \times 12 = 144$ (T) · $12 \times 10 = 120$ (S) · $5 \times 3 = 15$ (A) · $8 \times 7 = 56$ (H) · $4 \times 2 = 8$ (F) · $12 \times 5 = 60$ (L) · $2 \times 1 = 2$ (B) · $6 \times 11 = 66$ (E) · $10 \times 10 = 100$ (Z) · $9 \times 5 = 45$ (Y) · $1 \times 5 = 5$ (I) · $1 \times 7 = 7$ (P) · $11 \times 2 = 22$ (R) · $5 \times 5 = 25$ (D) · $5 \times 8 = 40$ (N) · $11 \times 3 = 33$ (O) · $7 \times 9 = 63$ (U)

Clue 2 (Fractions of a number): "THE COCKPIT DIALS WERE SMASHED ON THE LEFT"

$5/6$ of 6 = 5 (T) · $7/8$ of 24 = 21 (A) · $3/6$ of 22 = 11 (R) · $2/5$ of 40 = 16 (M) · $1/10$ of 90 = 9 (E) · $2/5$ of 90 = 36 (F) · $6/8$ of 36 = 27 (L) · $2/5$ of 100 = 40 (H) · $1/6$ of 12 = 2 (O) · $1/6$ of 144 = 24 (P) · $2/5$ of 55 = 22 (D) · $2/5$ of 35 = 14 (W) · $4/8$ of 58 = 29 (I) · $2/8$ of 28 = 7 (C) · $1/3$ of 36 = 12 (K) · $1/3$ of 18 = 6 (S) · $2/8$ of 136 = 34 (N)

Clue 3 (Order of operations): "SENSORS DETECTED EXTREME SONAR RESISTANCE"

$23 + 7 \times 8 = 79$ (S) · $4 \times 11 - 12 = 32$ (C) · $64 + 3 \times 4 = 76$ (R) · $8 \times 6 - 13 = 35$ (M) · $9 + 9 \times 5 = 54$ (X) · $21 + 5 \times 8 = 61$ (N) · $11 \times 7 - 15 = 62$ (I) · $6 \times 6 - 18 = 18$ (A) · $12 \times 6 - 20 = 52$ (O) · $3 + 3 \times 2 = 9$ (E) · $34 + 3 \times 5 = 49$ (T) · $10 \times 6 - 4 = 56$ (D)

Clue 4 (Rounding): "WE FOUND SPIKY BLACK STRANDS IN THE SEAT"

Round 50 to the nearest ten = 50 (W) · Round 940 to the nearest hundred = 900 (A) · Round 86 to the nearest ten = 90 (O) · Round 2,944 to the nearest hundred = 2900 (R) · Round 108 to the nearest ten = 110 (U) · Round 70 to the nearest ten = 70 (N) · Round 18 to the nearest ten = 20 (D) · Round 373 to the nearest ten = 370 (T) · Round 2,070 to the nearest thousand = 2000 (P) · Round 8,949 to the nearest thousand = 9000 (I) · Round 230 to the nearest ten = 230 (H) · Round 521 to the nearest hundred = 500 (Y) · Round 5,422 to the nearest thousand = 5000 (L) · Round 7,338 to the nearest thousand = 7000 (E) · Round 4,349 to the nearest hundred = 4300 (C) · Round 1,736 to the nearest hundred = 1700 (F) · Round 2,799 to the nearest thousand = 3000 (K) · Round 426 to the nearest ten = 430 (S) · Round 287 to the nearest ten = 290 (B)

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

$84 \div 7 = 12$ · $56 \div 8 = 7$ · $5 \div 1 = 5$ · $70 \div 7 = 10$ · $40 \div 10 = 4$ · $56 \div 7 = 8$ · $14 \div 7 = 2$ · $81 \div 9 = 9$ · $33 \div 3 = 11$ · $3 \div 1 = 3$ · $42 \div 7 = 6$