



The Case of the Missing Spy-Bot

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

Detective: _____ **Date:** _____

A legendary prototype Spy-Bot has been taken from the high-tech vault at the Secret Agent Academy! The Head Gadgetmaster needs your help. One of the trainee agents is actually a rogue double-agent. Follow the clues, solve the training challenges, and recover the Spy-Bot!

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 agent is _____

Possible suspects

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

NAME	PRIMARY GADGET	DISGUISE GEAR	WRITING HAND	HAIR DYE STREAK	ACADEMY TRAP
Agent Miller	laser watch	fake mustache	left handed	neon pink streak	loud siren alarm
Agent Davis	laser watch	glow badge	right handed	neon green streak	sticky gum trap
Agent Foster	laser watch	fake mustache	right handed	neon green streak	bright flashbang
Agent Cooper	grappling pen	voice changer	left handed	neon green streak	loud siren alarm
Agent Knight	rocket boots	camo cloak	right handed	neon pink streak	bright flashbang
Agent Hunter	grappling pen	voice changer	right handed	neon blue streak	loud siren alarm
Agent Carter	holo glasses	fake mustache	left handed	neon green streak	loud siren alarm
Agent Hayes	grappling pen	wig kit	right handed	neon green streak	sticky gum trap
Agent Chase	laser watch	glow badge	left handed	neon green streak	loud siren alarm
Agent Chen	sonic whistle	fake mustache	left handed	neon green streak	bright flashbang
Agent Torres	holo glasses	camo cloak	left handed	neon green streak	bright flashbang
Agent Sharpe	grappling pen	glow badge	left handed	neon pink streak	bright flashbang
Agent Wilde	laser watch	camo cloak	right handed	neon green streak	bright flashbang
Agent Drake	laser watch	glow badge	left handed	neon green streak	bright flashbang
Agent Cross	rocket boots	wig kit	left handed	neon blue streak	bright flashbang
Agent Smith	holo glasses	wig kit	left handed	neon pink streak	bright flashbang
Agent Sterling	grappling pen	voice changer	right handed	neon pink streak	loud siren alarm
Agent Pierce	rocket boots	wig kit	right handed	neon green streak	sticky gum trap
Agent Vance	rocket boots	wig kit	left handed	neon pink streak	bright flashbang
Agent Stone	holo glasses	voice changer	left handed	neon pink streak	bright flashbang
Agent Bishop	holo glasses	fake mustache	left handed	neon pink streak	bright flashbang

Fractions of a number

We found a secure lockbox containing files on the rogue agent's disguise gear. To open it, you must figure out exactly what fraction of the security grid's active beams have been deactivated.

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

38 26 39 3 2 27 29 39 30 27 39 34 38 20 2 39 7

34 2 38 26 30 21 39 30 27 5 2 4 31 30 20 27 39

4/10 of 95 = → **T**

4/10 of 10 = → **W**

$3/6$ of $14 = \boxed{} \rightarrow \boxed{\text{S}}$

4/8 of 68 = → **N**

$2/5$ of 50 = $\rightarrow$ **D**

$$1/6 \text{ of } 30 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$1/8 \text{ of } 24 = \boxed{} \rightarrow \boxed{\text{R}}$$

$\frac{1}{2}$ of 60 = $\rightarrow$ **A**

$3/4$ of 36 = $\rightarrow$ **G**

$$\frac{1}{6} \text{ of } 156 = \boxed{} \rightarrow \boxed{\text{H}}$$

$\frac{1}{5}$ of 145 = $\rightarrow$ **U**

$\frac{1}{5}$ of 10 = $\rightarrow$

$\frac{1}{4}$ of 156 = $\rightarrow$ **E**

7/10 of 30 = → **V**

$$2/10 \text{ of } 155 = \boxed{} \rightarrow \boxed{}$$

Scratch space:

CLUE 2

Order of operations

A coded transmission from the control room contains clues about the suspect's writing hand. Solve this multi-step code circuit using the strict order of spy operations to bypass the firewall.

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

T								T				T			T			
28	17	19	64	76	19	40	28	6	74	9	28	19	28	17	19			
		T				T		T					T					
40	9	28	19	6	44	28	17	28	17	19	42	19	51	28	17	64	40	30

$4 \times 9 - 8 = \square \rightarrow \boxed{\text{T}}$

$7 \times 4 - 19 = \square \rightarrow \boxed{\text{O}}$

$3 + 2 \times 7 = \square \rightarrow \boxed{\text{H}}$

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

$2 + 4 \times 7 = \square \rightarrow \boxed{\text{D}}$

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

$3 + 8 \times 2 = \square \rightarrow \boxed{\text{E}}$

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

$7 \times 9 - 19 = \square \rightarrow \boxed{\text{I}}$

$11 \times 7 - 13 = \square \rightarrow \boxed{\text{A}}$

$11 \times 8 - 14 = \square \rightarrow \boxed{\text{R}}$

$60 + 2 \times 8 = \square \rightarrow \boxed{\text{G}}$

$39 + 3 \times 4 = \square \rightarrow \boxed{\text{F}}$

Scratch space:

Multiplication facts (1-12)

The security guard remembers setting up rows of defensive traps in the sector. Calculate the total number of defense traps across these equal rows to unlock the suspect's weakness file.

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

$$2 \times 11 = \boxed{} \rightarrow \boxed{\text{A}}$$

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

$1 \times 5 = \boxed{} \rightarrow \boxed{\text{N}}$

$$9 \times 7 = \boxed{} \rightarrow \boxed{}$$

$10 \times 10 = \boxed{} \rightarrow \boxed{\mathbf{W}}$

$9 \times 10 = \boxed{} \rightarrow \boxed{\text{E}}$

$12 \times 8 = \boxed{} \rightarrow \boxed{\text{T}}$

$$3 \times 2 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$7 \times 11 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$2 \times 2 = \boxed{} \rightarrow \boxed{\text{H}}$$

$10 \times 6 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

$4 \times 4 = \boxed{} \rightarrow \boxed{\mathbf{S}}$

$1 \times 7 = \boxed{} \rightarrow \boxed{\mathbf{B}}$

$6 \times 5 = \boxed{} \rightarrow \boxed{\text{D}}$

Scratch space:

CLUE 4 Rounding

The thermal scanner picked up a trace of hair dye, but the digital signal is fuzzy and only shows a rounded number. Round the frequency to the nearest hundred to isolate the exact hair color.

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

T															
110	700	130	370	230	130	50	130	700	2000	170	2000	50	130	1700	50
									T						
290	7000	50	900	700	2000	7000	3700	370	110	3700	2000	50	170		

Round 110 to the nearest ten → **T**

Round 708 to the nearest hundred → **H**

Round 920 to the nearest hundred → **K**

Round 288 to the nearest ten → **P**

Round 1,704 to the nearest thousand → **A**

Round 1,717 to the nearest hundred → **O**

Round 3,704 to the nearest hundred → **R**

Round 172 to the nearest ten → **D**

Round 130 to the nearest ten → **E**

Round 372 to the nearest ten → **S**

Round 7,380 to the nearest thousand → **I**

Round 232 to the nearest ten → **C**

Round 54 to the nearest ten → **N**

Scratch space:

CLUE 5**Fractions of a number - the last clue**

To retrieve the final security report, you need to divide the remaining energy cells among the recovery drones. Figure out the fraction of energy left to power the printer.

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:

$2/5 \text{ of } 25 = \boxed{}$

$3/10 \text{ of } 30 = \boxed{}$

$2/10 \text{ of } 25 = \boxed{}$

$6/8 \text{ of } 8 = \boxed{}$

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

$2/10 \text{ of } 5 = \boxed{}$

$3/10 \text{ of } 10 = \boxed{}$

$1/4 \text{ of } 44 = \boxed{}$

$1/5 \text{ of } 10 = \boxed{}$

$4/8 \text{ of } 14 = \boxed{}$

$2/6 \text{ of } 24 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain zapped the vault lock with a laser watch, then vanished into the shadows using a camo cloak.
2. The villain swung across the laser grid with a grappling pen, then spoke into the intercom with a voice changer.
3. The villain swung across the laser grid with a grappling pen, then unlocked the private elevator with a glow badge.
4. The villain zapped the vault lock with a laser watch, then sneaked past the guards wearing a fake mustache.
5. The villain fooled the biometric scanners with holo glasses, then changed their identity using a wig kit.
6. The villain shattered the alarm glass with a sonic whistle, then changed their identity using a wig kit.
7. The villain shattered the alarm glass with a sonic whistle, then sneaked past the guards wearing a fake mustache.
8. The villain shattered the alarm glass with a sonic whistle, then spoke into the intercom with a voice changer.
9. The villain blasted over the security fence with rocket boots, then changed their identity using a wig kit.
10. The villain fooled the biometric scanners with holo glasses, then sneaked past the guards wearing a fake mustache.
11. The villain zapped the vault lock with a laser watch, then changed their identity using a wig kit.
12. The villain fooled the biometric scanners with holo glasses, then spoke into the intercom with a voice changer.

Answer Key

The Case of the Missing Spy-Bot

Culprit: Agent Stone

holo glasses · voice changer · left handed · neon pink streak · bright flashbang

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE ROGUE AGENT DOES NOT HAVE A GLOW BADGE"

$4/10$ of 95 = 38 (T) · $4/10$ of 10 = 4 (W) · $3/6$ of 14 = 7 (S) · $4/8$ of 68 = 34 (N) · $2/5$ of 50 = 20 (D) · $1/6$ of 30 = 5 (L) · $1/8$ of 24 = 3 (R) · $1/2$ of 60 = 30 (A) · $3/4$ of 36 = 27 (G) · $1/6$ of 156 = 26 (H) · $1/5$ of 145 = 29 (U) · $1/5$ of 10 = 2 (O) · $1/4$ of 156 = 39 (E) · $7/10$ of 30 = 21 (V) · $2/10$ of 155 = 31 (B)

Clue 2 (Order of operations): "THE AGENT WROTE THE NOTE WITH THE LEFT HAND"

$4 \times 9 - 8 = 28$ (T) · $7 \times 4 - 19 = 9$ (O) · $3 + 2 \times 7 = 17$ (H) · $2 + 2 \times 2 = 6$ (W) · $2 + 4 \times 7 = 30$ (D) · $8 \times 6 - 6 = 42$ (L) · $3 + 8 \times 2 = 19$ (E) · $9 \times 5 - 5 = 40$ (N) · $7 \times 9 - 19 = 44$ (I) · $11 \times 7 - 13 = 64$ (A) · $11 \times 8 - 14 = 74$ (R) · $60 + 2 \times 8 = 76$ (G) · $39 + 3 \times 4 = 51$ (F)

Clue 3 (Multiplication facts (1-12)): "A BRIGHT FLASHBANG WILL BLIND THIS AGENT"

$2 \times 11 = 22$ (A) · $8 \times 4 = 32$ (F) · $1 \times 5 = 5$ (N) · $9 \times 7 = 63$ (I) · $10 \times 10 = 100$ (W) · $9 \times 10 = 90$ (E) · $12 \times 8 = 96$ (T) · $3 \times 2 = 6$ (L) · $7 \times 11 = 77$ (R) · $2 \times 2 = 4$ (H) · $10 \times 6 = 60$ (G) · $4 \times 4 = 16$ (S) · $1 \times 7 = 7$ (B) · $6 \times 5 = 30$ (D)

Clue 4 (Rounding): "THE SCENE HAD A NEON PINK HAIR STRAND"

Round 110 to the nearest ten = 110 (T) · Round 708 to the nearest hundred = 700 (H) · Round 920 to the nearest hundred = 900 (K) · Round 288 to the nearest ten = 290 (P) · Round 1,704 to the nearest thousand = 2000 (A) · Round 1,717 to the nearest hundred = 1700 (O) · Round 3,704 to the nearest hundred = 3700 (R) · Round 172 to the nearest ten = 170 (D) · Round 130 to the nearest ten = 130 (E) · Round 372 to the nearest ten = 370 (S) · Round 7,380 to the nearest thousand = 7000 (I) · Round 232 to the nearest ten = 230 (C) · Round 54 to the nearest ten = 50 (N)

Clue 5 (Fractions of a number): surviving statement is box 12 → Agent Stone

$2/5$ of 25 = 10 · $3/10$ of 30 = 9 · $2/10$ of 25 = 5 · $6/8$ of 8 = 6 · $8/10$ of 5 = 4 · $2/10$ of 5 = 1 · $3/10$ of 10 = 3 · $1/4$ of 44 = 11 · $1/5$ of 10 = 2 · $4/8$ of 14 = 7 · $2/6$ of 24 = 8