The Case of the Star Port Pirate

Grade 3 math · Rounding, Addition, Subtraction, Multiplication, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Last night someone snatched the Star Captain right off the docking deck of Orbit-9. The thief left behind a trail of clues, a chipped helmet, and one scared robot guard. You are the station's youngest detective, and the math machines are the only witnesses you have.

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 Star Port Pirate is _____

Possible suspects

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

NAME	PIRATE TRICK	GADGET	CREW TYPE	HELMET COLOR	WEAKNESS
Milo Asteroid	Plasma Whip	Magnet Glove	Human Pirate	Blue Helmet	Sticky Goo
Gus Galaxy	Gravity Hook	Cloaking Cape	Alien Pirate	Red Helmet	Bright Light
Polly Plasma	Rocket Boots	Cloaking Cape	Alien Pirate	Blue Helmet	Bright Light
Luna Blackbolt	Star Net	Magnet Glove	Human Pirate	Blue Helmet	Sticky Goo
Stella Cutlass	Star Net	Robot Parrot	Alien Pirate	Blue Helmet	Loud Bells
Finn Rocket	Star Net	Cloaking Cape	Human Pirate	Red Helmet	Sticky Goo
Rana Nyx	Star Net	Cloaking Cape	Alien Pirate	Blue Helmet	Bright Light
Orbit Kate	Gravity Hook	Magnet Glove	Human Pirate	Green Helmet	Loud Bells
Dash Quasar	Gravity Hook	Robot Parrot	Human Pirate	Red Helmet	Sticky Goo
Rex Meteor	Plasma Whip	Magnet Glove	Alien Pirate	Blue Helmet	Loud Bells
Captain Nova	Gravity Hook	Magnet Glove	Alien Pirate	Green Helmet	Loud Bells
Pip Stardust	Star Net	Robot Parrot	Human Pirate	Red Helmet	Sticky Goo
Vega Quill	Rocket Boots	Magnet Glove	Human Pirate	Blue Helmet	Bright Light
Nebula Sue	Laser Cutlass	Warp Jump	Human Pirate	Blue Helmet	Sticky Goo
Comet Joe	Laser Cutlass	Robot Parrot	Alien Pirate	Blue Helmet	Bright Light
Zara Starblade	Plasma Whip	Warp Jump	Alien Pirate	Blue Helmet	Bright Light
Mira Comet	Star Net	Warp Jump	Human Pirate	Green Helmet	Bright Light
Sol Marlow	Rocket Boots	Robot Parrot	Alien Pirate	Green Helmet	Bright Light
Juno Blaze	Laser Cutlass	Cloaking Cape	Alien Pirate	Blue Helmet	Bright Light
Buzz Halley	Rocket Boots	Magnet Glove	Human Pirate	Blue Helmet	Loud Bells
Astra Vex	Star Net	Warp Jump	Alien Pirate	Green Helmet	Loud Bells

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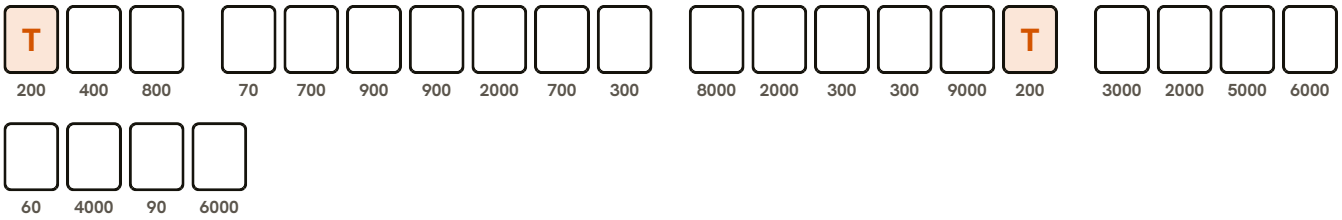
CLUE 1 Rounding

> The station radar tracked the thief's ship, but the old screen only shows speeds rounded to the nearest ten. Round the reading to learn one gadget the pirate did not use.

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



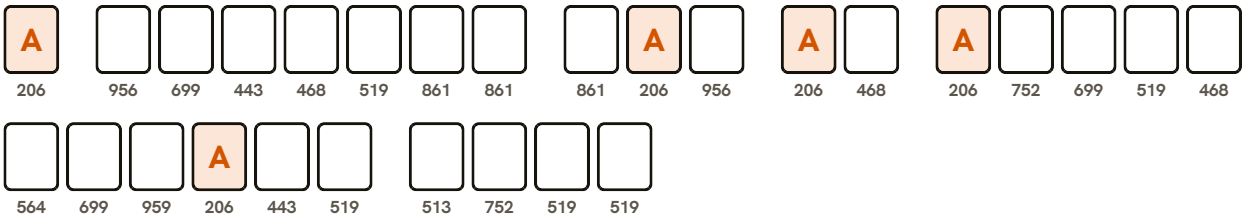
Round 192 to the nearest hundred		T	Round 707 to the nearest hundred		I	Round 5,225 to the nearest thousand		R
Round 2,945 to the nearest thousand		W	Round 8,769 to the nearest thousand		O	Round 379 to the nearest hundred		H
Round 61 to the nearest ten		J	Round 273 to the nearest hundred		N	Round 73 to the nearest ten		V
Round 5,890 to the nearest thousand		P	Round 3,660 to the nearest thousand		U	Round 864 to the nearest hundred		L
Round 757 to the nearest hundred		E	Round 8,003 to the nearest thousand		C	Round 90 to the nearest ten		M
Round 1,553 to the nearest thousand		A						

Scratch space:

CLUE 2 Addition

> You hurry to the cargo bay and find stolen crates in two messy piles. Add the crates in each pile to figure out if a human or alien pirate did the job.

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



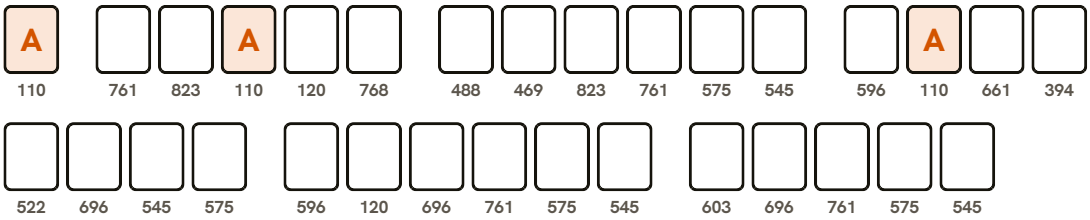
93 + 113 =		A	229 + 470 =		I	289 + 179 =		N
350 + 402 =		L	534 + 422 =		W	515 + 444 =		R
295 + 224 =		E	183 + 260 =		T	434 + 427 =		S
241 + 323 =		P	165 + 348 =		F			

Scratch space:

CLUE 3 Subtraction

> The dock log says how many escape pods started the night and how many are still parked. Subtract to see how many pods are missing, and which weakness scared the pirate off.

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



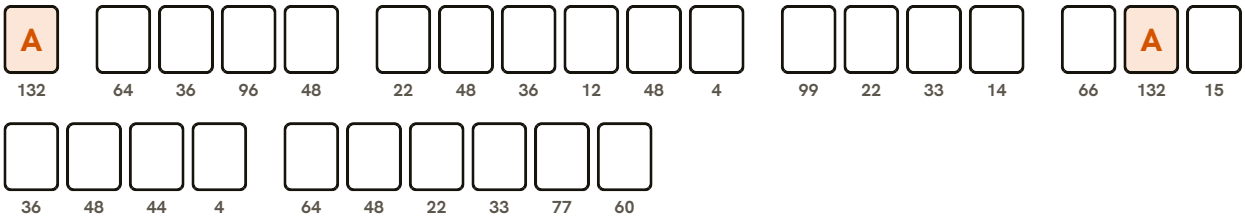
434 - 324 =		A	740 - 271 =		O	712 - 224 =		F
801 - 256 =		T	905 - 330 =		H	860 - 257 =		L
1088 - 265 =		U	197 - 77 =		R	795 - 134 =		C
780 - 19 =		G	841 - 73 =		D	868 - 346 =		W
784 - 88 =		I	484 - 90 =		K	959 - 363 =		B

Scratch space:

CLUE 4 Multiplication facts (1-12)

> Behind the lockers you spot rows of tiny helmet chips. Count the rows and the chips in each row, then multiply to match the helmet color left behind.

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



11 × 12 =		A	4 × 1 =		T	12 × 1 =		M
8 × 12 =		U	6 × 8 =		E	11 × 7 =		N
8 × 8 =		B	2 × 7 =		P	2 × 11 =		H
6 × 11 =		W	3 × 5 =		S	11 × 9 =		C
6 × 10 =		D	9 × 4 =		L	11 × 3 =		I
11 × 4 =		F						

Scratch space:

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

> Time to search the station. Split the guards into equal teams for each hallway by dividing them up, and the last clue will point straight at the pirate.

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:

24 ÷ 2 = ☐	40 ÷ 8 = ☐	88 ÷ 8 = ☐
110 ÷ 11 = ☐	40 ÷ 5 = ☐	54 ÷ 9 = ☐
10 ÷ 5 = ☐	63 ÷ 7 = ☐	12 ÷ 3 = ☐
28 ÷ 4 = ☐	2 ÷ 2 = ☐	

Step 2 - cross out the sentence with each answer:

1. The villain snags loot with a gravity hook, then grabs keys with a magnet glove.
2. The villain blasts off in rocket boots, then grabs keys with a magnet glove.
3. The villain tosses a star net, then vanishes under a cloaking cape.
4. The villain swings in on a laser cutlass, then drops a smoke bomb.
5. The villain blasts off in rocket boots, then vanishes under a cloaking cape.
6. The villain cracks a plasma whip, then sends a robot parrot to scout.
7. The villain blasts off in rocket boots, then warps far away.
8. The villain tosses a star net, then warps far away.
9. The villain snags loot with a gravity hook, then drops a smoke bomb.
10. The villain cracks a plasma whip, then drops a smoke bomb.
11. The villain swings in on a laser cutlass, then vanishes under a cloaking cape.
12. The villain swings in on a laser cutlass, then sends a robot parrot to scout.

TEACHER / PARENT

Answer Key

The Case of the Star Port Pirate

Culprit: Rana Nyx

Star Net · Cloaking Cape · Alien Pirate · Blue Helmet · Bright Light

Trail: Start 21 → Clue 1 17 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN CANNOT WARP JUMP"

Round 192 to the nearest hundred = 200 (T) · Round 707 to the nearest hundred = 700 (I) · Round 5,225 to the nearest thousand = 5000 (R) · Round 2,945 to the nearest thousand = 3000 (W) · Round 8,769 to the nearest thousand = 9000 (O) · Round 379 to the nearest hundred = 400 (H) · Round 61 to the nearest ten = 60 (J) · Round 273 to the nearest hundred = 300 (N) · Round 73 to the nearest ten = 70 (V) · Round 5,890 to the nearest thousand = 6000 (P) · Round 3,660 to the nearest thousand = 4000 (U) · Round 864 to the nearest hundred = 900 (L) · Round 757 to the nearest hundred = 800 (E) · Round 8,003 to the nearest thousand = 8000 (C) · Round 90 to the nearest ten = 90 (M) · Round 1,553 to the nearest thousand = 2000 (A)

Clue 2 (Addition): "A WITNESS SAW AN ALIEN PIRATE FLEE"

93 + 113 = 206 (A) · 229 + 470 = 699 (I) · 289 + 179 = 468 (N) · 350 + 402 = 752 (L) · 534 + 422 = 956 (W) · 515 + 444 = 959 (R) · 295 + 224 = 519 (E) · 183 + 260 = 443 (T) · 434 + 427 = 861 (S) · 241 + 323 = 564 (P) · 165 + 348 = 513 (F)

Clue 3 (Subtraction): "A GUARD FOUGHT BACK WITH BRIGHT LIGHT"

434 - 324 = 110 (A) · 740 - 271 = 469 (O) · 712 - 224 = 488 (F) · 801 - 256 = 545 (T) · 905 - 330 = 575 (H) · 860 - 257 = 603 (L) · 1088 - 265 = 823 (U) · 197 - 77 = 120 (R) · 795 - 134 = 661 (C) · 780 - 19 = 761 (G) · 841 - 73 = 768 (D) · 868 - 346 = 522 (W) · 784 - 88 = 696 (I) · 484 - 90 = 394 (K) · 959 - 363 = 596 (B)

Clue 4 (Multiplication facts (1-12)): "A BLUE HELMET CHIP WAS LEFT BEHIND"

11 × 12 = 132 (A) · 4 × 1 = 4 (T) · 12 × 1 = 12 (M) · 8 × 12 = 96 (U) · 6 × 8 = 48 (E) · 11 × 7 = 77 (N) · 8 × 8 = 64 (B) · 2 × 7 = 14 (P) · 2 × 11 = 22 (H) · 6 × 11 = 66 (W) · 3 × 5 = 15 (S) · 11 × 9 = 99 (C) · 6 × 10 = 60 (D) · 9 × 4 = 36 (L) · 11 × 3 = 33 (I) · 11 × 4 = 44 (F)

Clue 5 (Division facts (1-12)): surviving statement is box 3 → Rana Nyx

24 ÷ 2 = 12 · 40 ÷ 8 = 5 · 88 ÷ 8 = 11 · 110 ÷ 11 = 10 · 40 ÷ 5 = 8 · 54 ÷ 9 = 6 · 10 ÷ 5 = 2 · 63 ÷ 7 = 9 · 12 ÷ 3 = 4 · 28 ÷ 4 = 7 · 2 ÷ 2 = 1