The Great Bottoms Mystery

Grade 1 math · Addition, Subtraction, Skip counting, Place value, Missing addends · Reading level grades 1-2

Detective: _____ **Date:** _____

Someone mixed up all the bottom wear outfits at the Pantsburg Style Depot! Solve the math clues to find out which suspect swapped the clothes!

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 Bottoms Bandit is _____

Possible suspects

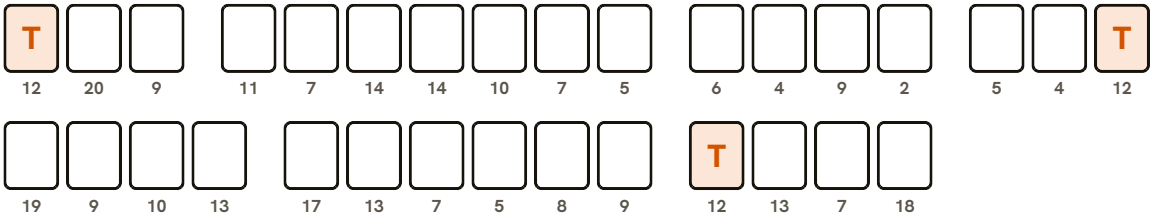
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	BOTTOMS STYLE	ACCESSORY	SHIRT STYLE	HAIRSTYLE	TOOL DEFECT
Belt Buckle Bob	Work Overalls	Neon Belts	Tucks In Shirts	Braided Pigtails	Lint Roller
Snap Sue	Cozy Sweatpants	Bright Suspenders	Tucks In Shirts	Curly Wig	Sticky Tape
Sam Shorts	Plaid Skirt	Bright Suspenders	Tucks In Shirts	Spiky Mohawk	Sticky Tape
Plaid Piper	Cargo Shorts	Brass Buckles	Tucks In Shirts	Spiky Mohawk	Zipper Jam
Fringe Fred	Plaid Skirt	Patched Pockets	Tucks In Shirts	Braided Pigtails	Zipper Jam
Stitch Stan	Plaid Skirt	Brass Buckles	Tucks In Shirts	Braided Pigtails	Sticky Tape
Pocket Patty	Work Overalls	Bright Suspenders	Leaves Shirts Untucked	Curly Wig	Sticky Tape
Cuff Clara	Plaid Skirt	Fringe Trim	Leaves Shirts Untucked	Spiky Mohawk	Lint Roller
Sallie Skirt	Work Overalls	Neon Belts	Tucks In Shirts	Spiky Mohawk	Lint Roller
Sweatpant Syd	Cozy Sweatpants	Brass Buckles	Tucks In Shirts	Braided Pigtails	Lint Roller
Pleat Pam	Denim Jeans	Fringe Trim	Tucks In Shirts	Curly Wig	Lint Roller
Loom Luke	Cozy Sweatpants	Brass Buckles	Tucks In Shirts	Spiky Mohawk	Lint Roller
Ollie Overalls	Denim Jeans	Bright Suspenders	Leaves Shirts Untucked	Spiky Mohawk	Sticky Tape
Cargo Carl	Plaid Skirt	Fringe Trim	Leaves Shirts Untucked	Spiky Mohawk	Sticky Tape
Penny Pants	Cargo Shorts	Fringe Trim	Tucks In Shirts	Spiky Mohawk	Lint Roller
Thread Thea	Cozy Sweatpants	Fringe Trim	Tucks In Shirts	Spiky Mohawk	Lint Roller
Jerry Jeans	Cargo Shorts	Bright Suspenders	Tucks In Shirts	Spiky Mohawk	Lint Roller
Denim Dan	Denim Jeans	Patched Pockets	Tucks In Shirts	Spiky Mohawk	Lint Roller
Button Ben	Cozy Sweatpants	Patched Pockets	Leaves Shirts Untucked	Spiky Mohawk	Sticky Tape
Zipper Zelda	Work Overalls	Patched Pockets	Leaves Shirts Untucked	Braided Pigtails	Sticky Tape
Patch Pete	Plaid Skirt	Bright Suspenders	Leaves Shirts Untucked	Spiky Mohawk	Lint Roller

CLUE 1 Addition

We add up all the pants dropped on the store floor to find our first clue.

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



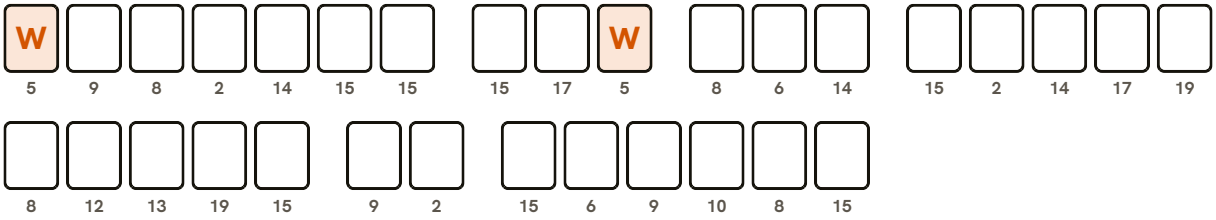
6 + 6 = ☐ → T	14 + 5 = ☐ → W	6 + 4 = ☐ → A	9 + 4 = ☐ → R
1 + 1 = ☐ → S	3 + 6 = ☐ → E	5 + 1 = ☐ → D	3 + 4 = ☐ → I
3 + 1 = ☐ → O	8 + 10 = ☐ → M	8 + 12 = ☐ → H	
4 + 7 = ☐ → V	6 + 2 = ☐ → G	2 + 3 = ☐ → N	8 + 6 = ☐ → L
11 + 6 = ☐ → F			

Scratch space:

CLUE 2 Subtraction

We take away the folded shorts from the total pile to see what is left.

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



12 - 7 = ☐ → W

16 - 1 = ☐ → S

19 - 6 = ☐ → C

20 - 3 = ☐ → A

16 - 4 = ☐ → U

9 - 3 = ☐ → H

20 - 6 = ☐ → E

16 - 6 = ☐ → R

11 - 3 = ☐ → T

20 - 1 = ☐ → K

7 - 5 = ☐ → N

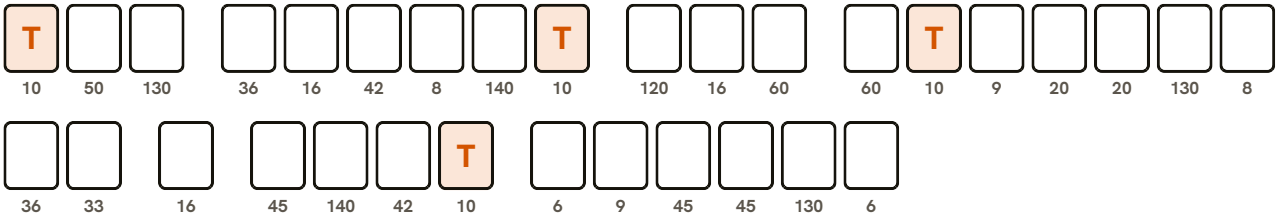
15 - 6 = ☐ → I

Scratch space:

CLUE 3 Skip counting

We count the belt loops by twos along the rack to find another hint.

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



Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 ☐ → T

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 ☐ → L

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 ☐ → H

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, ___, 36, 39 ☐ → Y

Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 ☐ → O

Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 ☐ → D

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, ___, 65, 70 ☐ → S

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

Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 ☐ → R

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, ___, 140, 150 ☐ → E

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, ___, 22, 24 ☐ → P

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, ___, 18, 20 ☐ → A

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, ___, 45, 48 ☐ → **N**

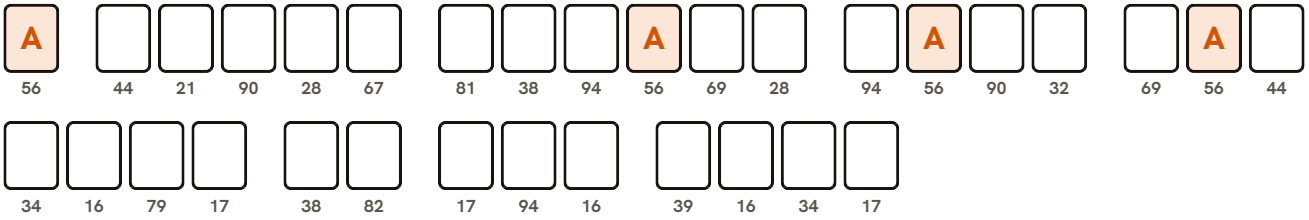
Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 ☐ → **W**

Scratch space:

CLUE 4 Place value

We look at the tens and ones on the clothing price tag to read a code.

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



What number has 5 tens and 6 ones? ☐ → A

What number has 9 tens and 0 ones? ☐ → I

What number has 9 tens and 4 ones? ☐ → H

What number has 6 tens and 9 ones? ☐ → W

What number has 4 tens and 4 ones? ☐ → S

What number has 8 tens and 2 ones? ☐ → N

What number has 8 tens and 1 one? ☐ → M

What number has 1 ten and 7 ones? ☐ → T

What number has 7 tens and 9 ones? ☐ → F

What number has 3 tens and 8 ones? ☐ → O

What number has 2 tens and 1 one? ☐ → P

What number has 1 ten and 6 ones? ☐ → E

What number has 3 tens and 9 ones? ☐ → B

What number has 2 tens and 8 ones? ☐ → K

What number has 6 tens and 7 ones? ☐ → Y

What number has 3 tens and 2 ones? ☐ → R

What number has 3 tens and 4 ones? ☐ → L

Scratch space:

CLUE 5

Missing addends - the last clue

We figure out how many more buttons we need to complete the rack mystery.

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:

3 + ___ = 6 ☐	5 + ___ = 17 ☐	9 + ___ = 13 ☐	3 + ___ = 9 ☐
4 + ___ = 14 ☐	10 + ___ = 21 ☐	3 + ___ = 8 ☐	5 + ___ = 13 ☐
4 + ___ = 6 ☐	6 + ___ = 13 ☐	8 + ___ = 9 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain snatched cozy sweatpants, then stuffed patched pockets.
2. The villain took a plaid skirt, then stuffed patched pockets.
3. The villain grabbed cargo shorts, then snapped bright suspenders.
4. The villain swiped work overalls, then buckled neon belts.
5. The villain grabbed cargo shorts, then clasped brass buckles.
6. The villain snatched cozy sweatpants, then buckled neon belts.
7. The villain took a plaid skirt, then buckled neon belts.
8. The villain snatched cozy sweatpants, then snapped bright suspenders.
9. The villain snagged denim jeans, then stuffed patched pockets.
10. The villain snagged denim jeans, then clasped brass buckles.
11. The villain swiped work overalls, then snapped bright suspenders.
12. The villain snatched cozy sweatpants, then clasped brass buckles.

TEACHER / PARENT

Answer Key

The Great Bottoms Mystery

Culprit: Denim Dan

Denim Jeans · Patched Pockets · Tucks In Shirts · Spiky Mohawk · Lint Roller

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT WEAR FRINGE TRIM"

6 + 6 = 12 (T) · 14 + 5 = 19 (W) · 6 + 4 = 10 (A) · 9 + 4 = 13 (R) · 1 + 1 = 2 (S) · 3 + 6 = 9 (E) · 5 + 1 = 6 (D) · 3 + 4 = 7 (I) · 3 + 1 = 4 (O) · 8 + 10 = 18 (M) · 8 + 12 = 20 (H) · 4 + 7 = 11 (V) · 6 + 2 = 8 (G) · 2 + 3 = 5 (N) · 8 + 6 = 14 (L) · 11 + 6 = 17 (F)

Clue 2 (Subtraction): "WITNESS SAW THE SNEAK TUCKS IN SHIRTS"

12 - 7 = 5 (W) · 16 - 1 = 15 (S) · 19 - 6 = 13 (C) · 20 - 3 = 17 (A) · 16 - 4 = 12 (U) · 9 - 3 = 6 (H) · 20 - 6 = 14 (E) · 16 - 6 = 10 (R) · 11 - 3 = 8 (T) · 20 - 1 = 19 (K) · 7 - 5 = 2 (N) · 15 - 6 = 9 (I)

Clue 3 (Skip counting): "THE BANDIT WAS STOPPED BY A LINT ROLLER"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 = 10 (T) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 = 45 (L) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 = 50 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ___, 39, 42 = 36 (B) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, ___, 36, 39 = 33 (Y) · Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 = 9 (O) · Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 = 8 (D) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, ___, 65, 70 = 60 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 = 140 (I) · Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 = 6 (R) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, ___, 140, 150 = 130 (E) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, ___, 22, 24 = 20 (P) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, ___, 18, 20 = 16 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, ___, 45, 48 = 42 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 = 120 (W)

Clue 4 (Place value): "A SPIKY MOHAWK HAIR WAS LEFT ON THE BELT"

What number has 5 tens and 6 ones? = 56 (A) · What number has 9 tens and 0 ones? = 90 (I) · What number has 9 tens and 4 ones? = 94 (H) · What number has 6 tens and 9 ones? = 69 (W) · What number has 4 tens and 4 ones? = 44 (S) · What number has 8 tens and 2 ones? = 82 (N) · What number has 8 tens and 1 one? = 81 (M) · What number has 1 ten and 7 ones? = 17 (T) · What number has 7 tens and 9 ones? = 79 (F) · What number has 3 tens and 8 ones? = 38 (O) · What number has 2 tens and 1 one? = 21 (P) · What number has 1 ten and 6 ones? = 16 (E) · What number has 3 tens and 9 ones? = 39 (B) · What number has 2 tens and 8 ones? = 28 (K) · What number has 6 tens and 7 ones? = 67 (Y) · What number has 3 tens and 2 ones? = 32 (R) · What number has 3 tens and 4 ones? = 34 (L)

Clue 5 (Missing addends): surviving statement is box 9 → Denim Dan

3 + ___ = 6 = 3 · 5 + ___ = 17 = 12 · 9 + ___ = 13 = 4 · 3 + ___ = 9 = 6 · 4 + ___ = 14 = 10 · 10 + ___ = 21 = 11 · 3 + ___ = 8 = 5 · 5 + ___ = 13 = 8 · 4 + ___ = 6 = 2 · 6 + ___ = 13 = 7 · 8 + ___ = 9 = 1