



The Great Clementine Squeeze

Grade 2 math · Place value, Addition, Subtraction, Skip counting, Missing addends · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone has squeezed all the prized sweet clementines in the Valley! The Head Farmer needs our help to find the sneaky Juice Bandit before the big Harvest Festival is ruined.

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 Juice Bandit is _____

Possible suspects

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

NAME	JUICING GEAR	SNEAKY GEAR	DOMINANT HAND	STEM HAT COLOR	FENDED OFF BY
Mandi	zest scraper	sticky boots	left-handed	yellow stem hat	water spray
Oran	pulp sprayer	branch stilts	right-handed	green stem hat	water spray
Pip	pulp sprayer	fruit basket	right-handed	yellow stem hat	loud whistle
Mikan	juice blaster	fruit basket	right-handed	brown stem hat	loud whistle
Satsuma	juice blaster	sticky boots	left-handed	yellow stem hat	flashlight beam
Tangy	zest scraper	leafy cloak	left-handed	yellow stem hat	flashlight beam
Leafy	juice blaster	sticky boots	left-handed	green stem hat	water spray
Branch	peel slicer	sticky boots	left-handed	yellow stem hat	flashlight beam
Pulp	pulp sprayer	sticky boots	left-handed	yellow stem hat	flashlight beam
Seed	peel slicer	sticky boots	left-handed	yellow stem hat	loud whistle
Nectar	citrus crusher	branch stilts	left-handed	brown stem hat	loud whistle
Blossom	juice blaster	juice thermos	right-handed	yellow stem hat	flashlight beam
Tina	peel slicer	fruit basket	left-handed	yellow stem hat	loud whistle
Clem	zest scraper	fruit basket	right-handed	brown stem hat	water spray
Tangelo	juice blaster	sticky boots	right-handed	yellow stem hat	flashlight beam
Squeeze	pulp sprayer	branch stilts	left-handed	yellow stem hat	loud whistle
Juice	zest scraper	fruit basket	left-handed	yellow stem hat	flashlight beam
Honey	pulp sprayer	leafy cloak	right-handed	yellow stem hat	water spray
Sweetie	zest scraper	leafy cloak	left-handed	brown stem hat	flashlight beam
Peel	juice blaster	sticky boots	right-handed	brown stem hat	flashlight beam
Tart	citrus crusher	juice thermos	left-handed	green stem hat	loud whistle

CLUE 1

The ranger found a locked crate. To open it, we must read the secret code of tens and ones written on the box.

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

48 83 25 49 99 67 71 58 48 71 65 25 22 67 65 48 15 22 25

99 35 14 15 58 48 49 99 22 95 25 48

What number has 4 tens and 8 ones?



What number has 2 tens and 2 ones?

A diagram illustrating a transition. On the left is a rounded rectangle. An arrow points from this rectangle to a square on the right. The square contains the letter 'S'.

What number has 4 tens and 9 ones?

A diagram showing a box with an arrow pointing to a box labeled B.

What number has 2 tens and 5 ones?

A diagram showing a box with a question mark pointing to a box with the letter E.

What number has 1 ten and 5 ones?

A diagram showing a rectangular box on the left, followed by a right-pointing arrow, and then a rounded rectangular box on the right containing the letter 'U'.

What number has 9 tens and 5 ones?

A diagram showing a rectangular box on the left, followed by a right-pointing arrow, and then a rounded rectangular box on the right containing the letter 'K'.

What number has 9 tens and 9 ones?

A diagram showing a mapping from an empty box to a box labeled 'A'. An arrow points from an empty box on the left to a box containing the letter 'A' on the right.

What number has 8 tens and 3 ones?

A diagram illustrating a transition. On the left is a simple rectangular box. An arrow points from this box to a second box on the right. The second box is a rounded square and contains the letter 'H' in a bold, black font.

What number has 5 tens and 8 ones?

A diagram showing a transformation. On the left is a rounded rectangle containing a question mark. An arrow points to the right, where another rounded rectangle contains the letter 'I'.

What number has 1 ten and 4 ones?

What number has 6 tens and 7 ones?

A diagram showing a mapping from an empty box to a box labeled 'N'. An arrow points from an empty box on the left to a box containing the letter 'N' on the right.

What number has 6 tens and 5 ones?

A diagram illustrating a transformation. On the left is a rectangle with a thin black border. An arrow points to the right, where there is a square with a thick black border. Inside the square is a small circle with a thick black border.

What number has 3 tens and 5 ones?

What number has 7 tens and 1 one?

Scratch space:

CLUE 2

Addition

We need to count all the orange baskets. Let us add the piles from the north grove and the south grove together.

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

T						T												T	
29	87	77	73	77	49	29	87	51	57	89	77	89	80	37	68	25	80	57	29
						T			T										
72	51	33	73	77	49	29	86	57	29	87	77	68	77	77	73				

$10 + 19 = \square \rightarrow \boxed{\text{T}}$

$21 + 51 = \square \rightarrow \boxed{\text{W}}$

$43 + 44 = \square \rightarrow \boxed{\text{H}}$

$48 + 20 = \square \rightarrow \boxed{\text{P}}$

$17 + 40 = \square \rightarrow \boxed{\text{N}}$

$33 + 47 = \square \rightarrow \boxed{\text{I}}$

$52 + 25 = \square \rightarrow \boxed{\text{E}}$

$35 + 14 = \square \rightarrow \boxed{\text{F}}$

$9 + 24 = \square \rightarrow \boxed{\text{S}}$

$23 + 28 = \square \rightarrow \boxed{\text{A}}$

$21 + 16 = \square \rightarrow \boxed{\text{M}}$

$45 + 28 = \square \rightarrow \boxed{\text{L}}$

$14 + 11 = \square \rightarrow \boxed{\text{R}}$

$60 + 26 = \square \rightarrow \boxed{\text{O}}$

$37 + 52 = \square \rightarrow \boxed{\text{D}}$

Scratch space:

CLUE 3
Subtraction

The bandit dropped some fruit. We had a full basket, but some rolled away. Subtract them to find what is left.

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

T																
19	20	62	66	13	80	80	89	13	70	63	89	70	44	63	77	38

T											T					
19	20	62	44	80	89	21	20	80	13	67	20	19	60	62	89	38

$26 - 7 = \square \rightarrow \boxed{\text{T}}$

$86 - 16 = \square \rightarrow \boxed{\text{N}}$

$62 - 2 = \square \rightarrow \boxed{\text{B}}$

$28 - 8 = \square \rightarrow \boxed{\text{H}}$

$64 - 2 = \square \rightarrow \boxed{\text{E}}$

$96 - 29 = \square \rightarrow \boxed{\text{G}}$

$51 - 13 = \square \rightarrow \boxed{\text{M}}$

$25 - 4 = \square \rightarrow \boxed{\text{S}}$

$90 - 10 = \square \rightarrow \boxed{\text{L}}$

$79 - 35 = \square \rightarrow \boxed{\text{F}}$

$75 - 12 = \square \rightarrow \boxed{\text{R}}$

$40 - 27 = \square \rightarrow \boxed{\text{I}}$

$93 - 16 = \square \rightarrow \boxed{\text{O}}$

$87 - 21 = \square \rightarrow \boxed{\text{V}}$

$101 - 12 = \square \rightarrow \boxed{\text{A}}$

Scratch space:

CLUE 4 Skip counting

We are searching the orchard rows. Let us count the trees by fives to reach the end of the field quickly.

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

A											A			A		
42	20	27	22	22	80	110	36	26	27	39	50	42	26	110	42	36

22	27	28	26	80	120	26	50	27	10	12	80	16	120	14	

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 → **D**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 → **U**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 → **G**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 → **E**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 → **L**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 → **F**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 → **R**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 → **O**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, __, 60, 70 → **H**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 → **M**

Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 → **Y**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 → **W**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 → **T**

Scratch space:

CLUE 5**Missing addends - the last clue**

The delivery truck needs more boxes. We know the total we want, so let us find how many more we must pack.

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:

$2 + \underline{\quad} = 14$

$1 + \underline{\quad} = 12$

$8 + \underline{\quad} = 16$

$10 + \underline{\quad} = 14$

$10 + \underline{\quad} = 12$

$5 + \underline{\quad} = 12$

$8 + \underline{\quad} = 9$

$2 + \underline{\quad} = 5$

$8 + \underline{\quad} = 18$

$5 + \underline{\quad} = 11$

$4 + \underline{\quad} = 9$

Step 2 - cross out the sentence with each answer:

1. The villain crushed the ripe fruit, then hid inside a leafy cloak.
2. The villain blasted juice all over, then packed everything into a fruit basket.
3. The villain crushed the ripe fruit, then escaped using sticky boots.
4. The villain scraped zest from the bark, then packed everything into a fruit basket.
5. The villain crushed the ripe fruit, then strutted off on branch stilts.
6. The villain sprayed sticky pulp everywhere, then strutted off on branch stilts.
7. The villain sprayed sticky pulp everywhere, then sipped from a juice thermos.
8. The villain sliced the delicate peels, then escaped using sticky boots.
9. The villain scraped zest from the bark, then hid inside a leafy cloak.
10. The villain sliced the delicate peels, then hid inside a leafy cloak.
11. The villain sprayed sticky pulp everywhere, then escaped using sticky boots.
12. The villain blasted juice all over, then escaped using sticky boots.

Answer Key

The Great Clementine Squeeze

Culprit: Tangy

zest scraper · leafy cloak · left-handed · yellow stem hat · flashlight beam

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

Clue 1 (Place value): "THE BANDIT DOES NOT USE A FRUIT BASKET"

What number has 4 tens and 8 ones? = 48 (T) · What number has 2 tens and 2 ones? = 22 (S) · What number has 4 tens and 9 ones? = 49 (B) · What number has 2 tens and 5 ones? = 25 (E) · What number has 1 ten and 5 ones? = 15 (U) · What number has 9 tens and 5 ones? = 95 (K) · What number has 9 tens and 9 ones? = 99 (A) · What number has 8 tens and 3 ones? = 83 (H) · What number has 5 tens and 8 ones? = 58 (I) · What number has 1 ten and 4 ones? = 14 (R) · What number has 6 tens and 7 ones? = 67 (N) · What number has 6 tens and 5 ones? = 65 (O) · What number has 3 tens and 5 ones? = 35 (F) · What number has 7 tens and 1 one? = 71 (D)

Clue 2 (Addition): "THE LEFT HANDED IMPRINT WAS LEFT ON THE PEEL"

$10 + 19 = 29$ (T) · $21 + 51 = 72$ (W) · $43 + 44 = 87$ (H) · $48 + 20 = 68$ (P) · $17 + 40 = 57$ (N) · $33 + 47 = 80$ (I) · $52 + 25 = 77$ (E) · $35 + 14 = 49$ (F) · $9 + 24 = 33$ (S) · $23 + 28 = 51$ (A) · $21 + 16 = 37$ (M) · $45 + 28 = 73$ (L) · $14 + 11 = 25$ (R) · $60 + 26 = 86$ (O) · $37 + 52 = 89$ (D)

Clue 3 (Subtraction): "THE VILLAIN RAN FROM THE FLASHLIGHT BEAM"

$26 - 7 = 19$ (T) · $86 - 16 = 70$ (N) · $62 - 2 = 60$ (B) · $28 - 8 = 20$ (H) · $64 - 2 = 62$ (E) · $96 - 29 = 67$ (G) · $51 - 13 = 38$ (M) · $25 - 4 = 21$ (S) · $90 - 10 = 80$ (L) · $79 - 35 = 44$ (F) · $75 - 12 = 63$ (R) · $40 - 27 = 13$ (I) · $93 - 16 = 77$ (O) · $87 - 21 = 66$ (V) · $101 - 12 = 89$ (A)

Clue 4 (Skip counting): "A YELLOW STEM HAT WAS LEFT ON THE GROUND"

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 = 14 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (U) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (G) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (E) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (L) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (F) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 = 120 (N) · Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 = 12 (R) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (O) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, __, 60, 70 = 50 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (M) · Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 = 20 (Y) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (W) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (T)

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

$2 + \underline{\quad} = 14 = 12$ · $1 + \underline{\quad} = 12 = 11$ · $8 + \underline{\quad} = 16 = 8$ · $10 + \underline{\quad} = 14 = 4$ · $10 + \underline{\quad} = 12 = 2$ · $5 + \underline{\quad} = 12 = 7$ · $8 + \underline{\quad} = 9 = 1$ · $2 + \underline{\quad} = 5 = 3$ · $8 + \underline{\quad} = 18 = 10$ · $5 + \underline{\quad} = 11 = 6$ · $4 + \underline{\quad} = 9 = 5$