

Subtracting with an Expanded Algorithm

Apple Hill is 568 feet high. Banana Hill is 293 feet high.
How many feet higher is Apple Hill than Banana Hill?

Find $568 - 293$.

"I need to find
 $568 - 293$."

Step 1

$$568 - 293 = ?$$

Start with 568.

Subtract the **2 hundreds**
in 293.

$$568 - 200 = 368$$

So far, 200 has
been subtracted.

Step 2

Now, start with 368.

Subtract the **9 tens** in 293.

There are not enough
tens. So, subtract the **6**
tens that are there.

$$368 - 60 = 308$$

Then, subtract the tens
that are left.

$$9 \text{ tens} - 6 \text{ tens} = 3 \text{ tens}$$

$$308 - 30 = 278$$

So far, $200 + 60 +$
 $30 = 290$ has been
subtracted.

Step 3

Start with 278.

Subtract the **3 ones** in
293.

$$278 - 3 = 275$$

In all $200 + 60 + 30 + 3 =$
293 has been subtracted.

Apple Hill is 275
feet higher than
Banana Hill.

1. Follow these steps to find $576 - 471$. 2. Follow these steps to find $365 - 138$.

First subtract 400.
Then, subtract 70.
Then, subtract 1.

First subtract 100.
Then, subtract 30.
Then, subtract 5.
Then, subtract 3.

3. Find $756 - 602$.

4. Find $848 - 276$.

5. Find $641 - 139$.

6. Sue's story is 367 words long.
Rob's story is 296 words long.
How many more words does Sue's
story have than Rob's?

7. **Reason** Find $496 - 217$. Were there
enough ones to subtract? How did
you know?

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- Follow these steps to find $879 - 659$.
First subtract 600.
Then, subtract 50.
Then, subtract 9.

- Follow these steps to find $775 - 431$.
First subtract 400.
Then, subtract 30.
Then, subtract 1.

- Follow these steps to find $564 - 117$.
First subtract 100.
Then, subtract 10.
Then, subtract 4.
Then, subtract 3.

- Follow these steps to find $428 - 275$.
First subtract 200.
Then, subtract 20.
Then, subtract 50.
Then, subtract 5.

- Find $684 - 362$.

- Find $208 - 135$.

- Find $479 - 283$.

- Find $614 - 153$.

- Eric and Kim are on a game show. Eric has 583 points. Kim has 349 points. How many more points does Eric have than Kim?

- Reason** Malcolm is trying to find $775 - 342$. He subtracts hundreds first, then tens, then ones. What three numbers did Malcolm subtract to find the answer?

- Communicate** Kyle is making a building out of blocks. So far his building is made up of 129 blocks. When his building is finished, it will have 275 blocks. How many more blocks does Kyle need to finish his building? Explain how you found your answer.

- Which of the following shows the numbers that can be subtracted to find $395 - 129$?
A 300, 90, 5 **B** 900, 20, 1 **C** 100, 20, 9, 5 **D** 100, 20, 5, 4