Think Before You Solve

GOAL Decide what a story is asking and what a sensible answer is before you solve.

1 More or less?

Two classes read 368 and 254 pages. More or less than 600 pages? ☐ more ☐ less

How do you know?

2 Is Sam correct?

Sam says: There were 512 people at a game after 238 more came in. To find how many came first, add 512 + 238.

Is Sam correct? ☐ yes ☐ no Explain why.

3 Which answer makes sense?

A school has 386 boys and 409 girls. How many students are there?

☐ 23 ☐ 785 ☐ 795

Tick the answer that makes sense. Why are the other two wrong?

4 Which hundreds?

A bakery made 275 rolls and 418 muffins. How many did it make in all?

Will the answer be in the 600s or the 700s? ☐ 600s ☐ 700s

How do you know?

5 Which equation matches?

Some cars were in a parking lot. Then 126 more cars came. Now there are 450 cars.

☐ **___ + 126 = 450** ☐ **450 + 126 = ___**

Tick the equation that matches. How do you know?

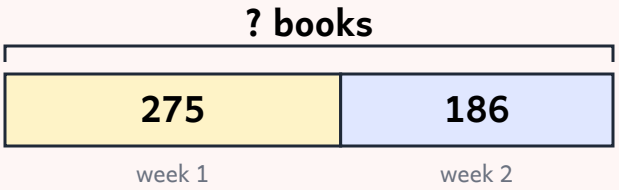
Three-Digit Addition in Stories

GOAL Show a story with a bar model and an equation, then solve it.

6 Read, draw, write, solve

WORKED EXAMPLE

A school collected **275** books in the first week and **186** books in the second week. How many books did it collect in all?



Equation: 275 + 186 = ___
Solve: 275 + 186 = 461
Check: about 280 + 190 = 470, close to 461.
Answer: 461 books

The bar shows two parts and the whole. The **?** marks what we need to find.

7 Your turn

Draw a bar model. Write an equation with ___ for the unknown. Solve.

A food bank had 345 cans. Then people gave 268 more cans. How many cans does it have now?

Draw a bar model.

Equation: _____

Answer: _____ cans

Show your work.

Find the Unknown Part

GOAL Solve stories where the unknown is a part, and use a table.

8 The unknown can be a part

In these stories we know the whole. Draw a bar model, put **?** where the unknown part goes, write an equation with ___, and solve.

a. A farm stand had 175 pumpkins in the morning. The farmer brought more. Now there are 620 pumpkins. How many did the farmer bring?

Draw a bar model.

Equation: _____

Answer: _____ pumpkins

b. Some books were on a cart. Then 128 more were put on it. Now there are 343 books on the cart. How many were on it at first?

Draw a bar model.

Equation: _____

Answer: _____ books

9 Use the table. Use a letter for each unknown.

Day	Books returned
Monday	245
Tuesday	175
Wednesday	80
Thursday	312

a. How many books were returned on Monday, Tuesday and Wednesday together?

Equation: _____ Answer: _____ books

b. How many were returned in all four days?

Equation: _____ Answer: _____ books

Extra Numbers and Good Sense

GOAL Ignore numbers you do not need, check that an answer makes sense, and write your own story.

10 Only what you need

Ms. Lee's class read **156** pages on Monday and **238** pages on Tuesday. There are **24** students in the class. How many pages did the class read on the two days?

Answer: _____ pages Which number did you not need? _____ Why not?

Show your work.

11 Does it make sense?

Jay says the school has **533** chairs: 386 in the classrooms and 247 in the hall. Estimate. Is Jay's total sensible?

About _____ + _____ = _____. Is 533 sensible? _____ The real total is _____ chairs.

Show your work.

12 Write your own story

Write a story that matches **348 + 257 = ___**. Then solve it.

Answer: _____

Think Before You Solve

GOAL Decide what a story is asking and what a sensible answer is before you solve.

1 More or less?

Two classes read 368 and 254 pages. More or less than 600 pages? ☐ more ☐ less

How do you know?

2 Is Sam correct?

Sam says: There were 512 people at a game after 238 more came in. To find how many came first, add 512 + 238.

Is Sam correct? ☐ yes ☐ no Explain why.

3 Which answer makes sense?

A school has 386 boys and 409 girls. How many students are there?

☐ 23 ☐ 785 ☐ 795

Tick the answer that makes sense. Why are the other two wrong?

4 Which hundreds?

A bakery made 275 rolls and 418 muffins. How many did it make in all?

Will the answer be in the 600s or the 700s? ☐ 600s ☐ 700s

How do you know?

5 Which equation matches?

Some cars were in a parking lot. Then 126 more cars came. Now there are 450 cars.

☐ **___ + 126 = 450** ☐ **450 + 126 = ___**

Tick the equation that matches. How do you know?

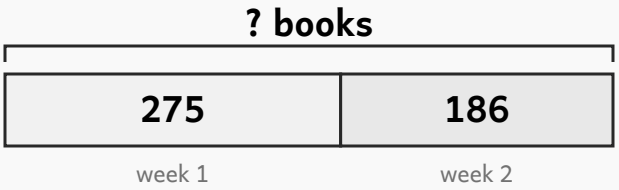
Three-Digit Addition in Stories

GOAL Show a story with a bar model and an equation, then solve it.

6 Read, draw, write, solve

WORKED EXAMPLE

A school collected **275** books in the first week and **186** books in the second week. How many books did it collect in all?



Equation: 275 + 186 = ___
Solve: 275 + 186 = 461
Check: about 280 + 190 = 470, close to 461.
Answer: 461 books

The bar shows two parts and the whole. The **?** marks what we need to find.

7 Your turn

Draw a bar model. Write an equation with ___ for the unknown. Solve.

A food bank had 345 cans. Then people gave 268 more cans. How many cans does it have now?

Draw a bar model.

Equation: _____

Answer: _____ cans

Show your work.

Find the Unknown Part

GOAL Solve stories where the unknown is a part, and use a table.

8 The unknown can be a part

In these stories we know the whole. Draw a bar model, put **?** where the unknown part goes, write an equation with ___, and solve.

a. A farm stand had 175 pumpkins in the morning. The farmer brought more. Now there are 620 pumpkins. How many did the farmer bring?

Draw a bar model.

Equation: _____

Answer: _____ pumpkins

b. Some books were on a cart. Then 128 more were put on it. Now there are 343 books on the cart. How many were on it at first?

Draw a bar model.

Equation: _____

Answer: _____ books

9 Use the table. Use a letter for each unknown.

Day	Books returned
Monday	245
Tuesday	175
Wednesday	80
Thursday	312

a. How many books were returned on Monday, Tuesday and Wednesday together?

Equation: _____ Answer: _____ books

b. How many were returned in all four days?

Equation: _____ Answer: _____ books

Extra Numbers and Good Sense

GOAL Ignore numbers you do not need, check that an answer makes sense, and write your own story.

10 Only what you need

Ms. Lee's class read **156** pages on Monday and **238** pages on Tuesday. There are **24** students in the class. How many pages did the class read on the two days?

Answer: _____ pages Which number did you not need? _____ Why not?

Show your work.

11 Does it make sense?

Jay says the school has **533** chairs: 386 in the classrooms and 247 in the hall. Estimate. Is Jay's total sensible?

About _____ + _____ = _____. Is 533 sensible? _____ The real total is _____ chairs.

Show your work.

12 Write your own story

Write a story that matches **348 + 257 = ___**. Then solve it.

Answer: _____

Think Before You Solve

Answers in blue. Accept other clear reasons.

1 More or less?

Two classes read 368 and 254 pages. More or less than 600 pages? ☑ more ☐ less

How do you know?

300 + 200 = 500, and 68 + 54 is more than 100: more than 600.

2 Is Sam correct?

Sam says: There were 512 people at a game after 238 more came in. To find how many came first, add 512 + 238.

Is Sam correct? ☐ yes ☑ no Explain why.

No. 512 is the total. The unknown is a part: ___ + 238 = 512, so 274 people were there at first.

3 Which answer makes sense?

A school has 386 boys and 409 girls. How many students are there?

☐ 23 ☐ 785 ☑ 795

Tick the answer that makes sense. Why are the other two wrong?

23 takes away, but the story puts two groups together. 785 forgets the new ten from 15 ones.

4 Which hundreds?

A bakery made 275 rolls and 418 muffins. How many did it make in all?

Will the answer be in the 600s or the 700s? ☑ 600s ☐ 700s

How do you know?

200 + 400 = 600, and 75 + 18 = 93, less than 100: the 600s.

5 Which equation matches?

Some cars were in a parking lot. Then 126 more cars came. Now there are 450 cars.

☑ **___ + 126 = 450** ☐ **450 + 126 = ___**

Tick the equation that matches. How do you know?

450 is the total and 126 is a part; the unknown is the cars at first.

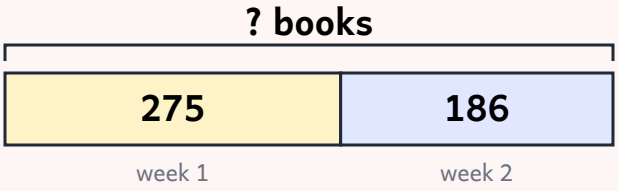
Three-Digit Addition in Stories

Answers in blue. Bar models may be drawn differently if the parts and the whole are right.

6 Read, draw, write, solve

WORKED EXAMPLE

A school collected **275** books in the first week and **186** books in the second week. How many books did it collect in all?



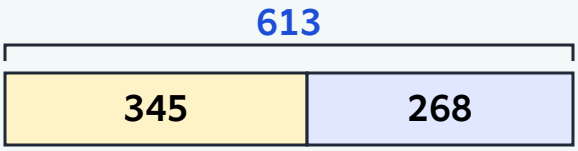
Equation: 275 + 186 = ___
Solve: 275 + 186 = 461
Check: about 280 + 190 = 470, close to 461.
Answer: 461 books

The bar shows two parts and the whole. The **?** marks what we need to find.

7 Your turn

Draw a bar model. Write an equation with ___ for the unknown. Solve.

A food bank had 345 cans. Then people gave 268 more cans. How many cans does it have now?



Equation: 345 + 268 = ___

Answer: 613 cans

Show your work.

One way: 5 + 8 = 13 ones, 4 + 6 + 1 = 11 tens, 3 + 2 + 1 = 6 hundreds: 613.

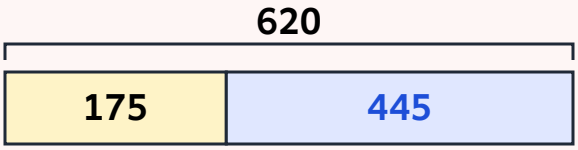
Find the Unknown Part

Answers in blue. Bar models may be drawn differently if the parts and the whole are right.

8 The unknown can be a part

In these stories we know the whole. Draw a bar model, put **?** where the unknown part goes, write an equation with ___, and solve.

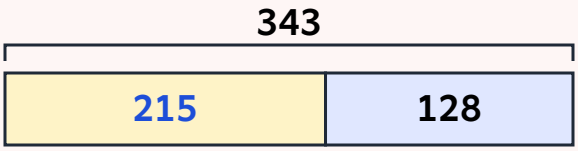
a. A farm stand had 175 pumpkins in the morning. The farmer brought more. Now there are 620 pumpkins. How many did the farmer bring?



Equation: 175 + ___ = 620

Answer: 445 pumpkins

b. Some books were on a cart. Then 128 more were put on it. Now there are 343 books on the cart. How many were on it at first?



Equation: ___ + 128 = 343

Answer: 215 books

Both stories are about adding, so the equations use +. Students may find the unknown by adding on (175 + 25 = 200, then + 420 = 620) or by subtracting (620 − 175); both are correct.

9 Use the table. Use a letter for each unknown.

Day	Books returned
Monday	245
Tuesday	175
Wednesday	80
Thursday	312

a. How many books were returned on Monday, Tuesday and Wednesday together?

Equation: 245 + 175 + 80 = b Answer: 500 books

b. How many were returned in all four days?

Equation: 500 + 312 = t Answer: 812 books

Any letter is fine. Part a: 245 + 175 = 420, + 80 = 500 (or 175 + 80 = 255, + 245 = 500). Part b uses part a: two steps.

Extra Numbers and Good Sense

Answers in blue. Task 12 has many right answers.

10 Only what you need

Ms. Lee's class read **156** pages on Monday and **238** pages on Tuesday. There are **24** students in the class. How many pages did the class read on the two days?

Answer: **394** pages Which number did you not need? **24** Why not?

The question asks about pages, not how many students.

Show your work.

One way: 6 + 8 = 14 ones, 5 + 3 + 1 = 9 tens, 1 + 2 = 3 hundreds: 394.

11 Does it make sense?

Jay says the school has **533** chairs: 386 in the classrooms and 247 in the hall. Estimate. Is Jay's total sensible?

About **390** + **250** = **640**. Is 533 sensible? **no** The real total is **633** chairs.

Accept other sensible estimates, e.g. 400 + 250 = 650. A sure check: 386 + 247 is more than 380 + 240 = 620, so 533 cannot be right. Jay forgot the new hundred from 13 tens.

Show your work.

One way: 6 + 7 = 13 ones, 8 + 4 + 1 = 13 tens, 3 + 2 + 1 = 6 hundreds: 633.

12 Write your own story

Write a story that matches **348 + 257 = ___**. Then solve it.

One answer: A theater sold 348 tickets on Friday and 257 on Saturday. How many tickets in all? 605 tickets.

Answer: **605**

Three-Digit Addition in Stories: teaching notes

GOAL

Students: I can show a story with a bar model and an equation, and solve it.
Precisely: represent additive situations within 1,000 (result unknown, change unknown, start unknown, two steps, extra information) and check that the answer is sensible.

THINK BEFORE YOU SOLVE (TASKS 1–5)

Five ways to think before solving: more or less than 600, a claim that adds the total to a part (Sam), the answer that makes sense (23 subtracts; 785 drops a ten), which hundreds, and which equation matches a start-unknown story. Ask what each number counts.

BEFORE THIS LESSON

Three-digit addition with trades (B20–B26) and bar models with smaller numbers (A13).

TEACH (TASK 6)

Read the story twice. First time: "What is happening?" Second time: "What are the numbers about? What are we finding?" Draw the bar together: two parts and a whole; put ? where the unknown is. Only then write the equation and solve. End with the estimate check.

TASKS 7–8: ONE IDEA, THREE UNKNOWNS

All three stories are about adding to a group; the unknown moves (the result in task 7, the change in 8a, the start in 8b). Insist on an equation with ___ in the place of the unknown (175 + ___ = 620). Students may then add on or subtract to find it: both are correct, and the equation still shows the story.

TASK 9: TWO STEPS

The equations use a letter for the unknown (b, t), as Grade 3 two-step problems ask. Part b can build on part a or add all four days.

AVOID KEY WORDS

Do not teach "more means add" or "in all means add". Story 8b says "more" and the unknown is the start, a part. Ask "Is the unknown a part or the whole?" instead.

Three-Digit Addition in Stories: teaching notes (continued)

MISCONCEPTIONS AND RESPONSES

- **Adds every number it sees** (175 + 620 = 795 in story 8a; adding the 24 students in task 10). Ask what each number counts.
- **Answer without units.** Ask: "461 what?"
- **Accepts an unreasonable total** (Jay's 533). Make the estimate a habit before and after.

WHAT TO LOOK FOR

Secure: correct models with the unknown in the right place, equations that match the story, correct sums and units, and the irrelevant number named. Developing: correct answers with models that do not match. Needs support: adds all numbers.

SUPPORT AND EXTENSION

Support: read stories aloud; give the bar frame with the whole and parts labeled. **Extension:** write a start-unknown story for ___ + 275 = 900 and a two-step story whose answer is 1,000.

ABOUT THE GRADE

Word problems within 1,000 are Grade 3 in Common Core and NC (Grade 2 problems stay within 100); Texas has them in Grade 2 (2.4(C)). Use this page in Grade 2 only where that standard applies.

STANDARDS

Set	Direct	Supporting
Common Core	3.NBT.A.2; 3.OA.D.8 (two-step, task 9)	3.NBT.A.1 (rounding to check); 2.OA.A.1 structures
NC 2017 (current)	NC.3.NBT.2; NC.3.OA.8 (two-step, task 9)	
NC 2026 (adopted; from 2028–29)	3.ANR.2.1; 3.ANR.6.1; 3.ANR.6.2	
Florida B.E.S.T.	MA.3.AR.1.2; MA.3.NSO.2.1	
Texas TEKS	3.4(A); 3.5(A)	2.4(C), 2.4(D)

Standards crosswalk, verified 2026-11-04 against corestandards.org, NC DPI (2017 SCOS; 2026 SCOS adopted Oct 1, 2026, in classrooms from 2028–29), FLDOE B.E.S.T. and TEA TEKS.