

Addition and Subtraction to 40

To the Teacher: Read directions aloud for children who may need assistance. Distribute copies of place-value charts if necessary for this Performance Task. Use differentiation to assess children's understanding of Problems 2 and 3.

1. Regroup the ones into tens and ones.

Complete the place-value chart.

Drow	for tone and	for once
Draw	∣for tens and [for ones.

2 tens _____15 ___ ones = 35 =

Tens	Ones

Accept 2 tens 15 ones or 3 tens 5 ones.

2. Add.

How did you solve?

Answers vary. Accept all reasonable answers. Example:

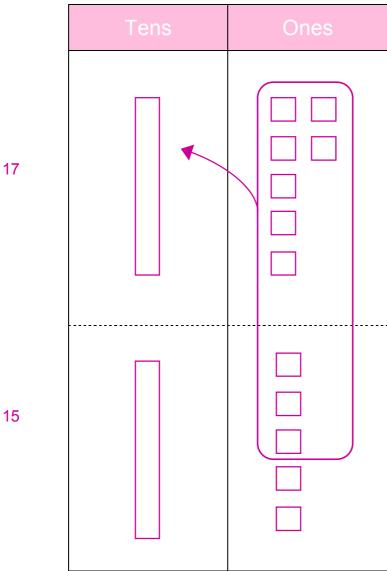
	Tens	Ones
25		
11		

3. Add.

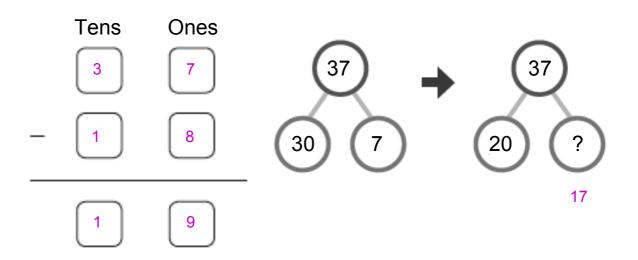
How did you solve?

Answers vary. Accept all reasonable answers.

Example:



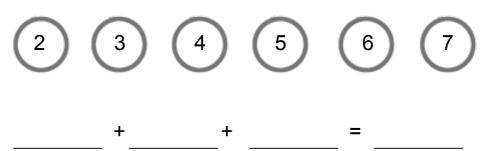
4. Portia has 37 chickens on her farm.18 of her chickens are hiding in the barn.How many chickens are not hiding?



______chickens are not hiding.

Which related addition fact would you use to check your answer?

5. Pick any three numbers that make the number 13. Use each number only once.



Answers vary. Accept 7, 4, and 2; 6, 5, and 2; 6, 4, and 3.

Task Specifications



- **1.0A.6** Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8+6=8+2+4=10+4=14); decomposing a number leading to a ten (e.g., 13-4=13-3-1=10-1=9); using the relationship between addition and subtraction (e.g., knowing that 8+4=12, one knows 12-8=4); and creating equivalent but easier or known sums (e.g., adding 6+7 by creating the known equivalent 6+6+1=12+1=13).
- **1.NBT.4** Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
- **1.OA.7** Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.
- **1.OA.8** Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.
- **1.NBT.6** Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
- **1.NBT.2.a** 10 can be thought of as a bundle of ten ones—called a "ten."
- **1.OA.4** Understand subtraction as an unknown addend problem.
- **1.OA.3** Apply properties of operations as strategies to add and subtract.
- **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹



Standards for Mathematical Practice

MP1: Make sense of problems and persevere in solving them.

Students have to identify and understand relationships involving place value and number sense in all problems to add and subtract with and without regrouping.

MP2: Reason abstractly and quantitatively.

Students can decontextualize given addition and subtraction problems to visualize how to regroup, add on, count on, and count backwards to decompose and recompose numbers.

MP6: Attend to precision.

In Problems 2 and 3 particularly, students have to be precise about how they came to their answers, and why.



Students will work on this performance task after completing Chapter 13 in Grade 1 Student Book B, in which students extend and apply their understanding of how to add and subtract using different strategies, which empowers them toward mastering the concepts acquired using their own metacognition. In this way, students would be accurately getting to the answer using multiple strategies, which is a focal point in Math in Focus[®]. Questions similar to Problems 1–4 are included in Chapter 13. Problem 5 is a reworking of Put On Your Thinking Cap! in Chapter 13 of Grade 1 Student Book B.

Scoring Guide

Problem		Point(s)
1.	The child: • fills in 15 as the missing number • draws 2 tens and 15 ones or 3 tens and 5 ones	1 0.5
2.	 The child: writes that the sum is 36 accurately explains in words or by drawing or by using connecting cubes how he or she got to his or her answer 	0.5 1
3.	The child: • writes that the sum is 32 • accurately explains in words or by drawing or by using connecting cubes how he or she got to his or her answer	0.5 1
4.	 The child: correctly decomposes 37 into 20 and 17 shows that 37 – 18 = 19 and writes that 19 chickens are not hiding in the barn writes the related addition fact as 19 + 18 = 37 	0.5 1 1
5.	The child: • accurately picks three numbers from the given set that add up to 13	1
Total Points		8

Rubric

Level	Point(s)	Child Proficiency
4	7–8	The child demonstrates:
3	5–6.5	The child demonstrates: substantial understanding of concepts efficient use of procedures adequate explanation
2	3–4.5	The child demonstrates:
1	1–2.5	The child demonstrates: Iack of content understanding rare use of effective strategies Iittle evidence of reasoning