2 Module 7

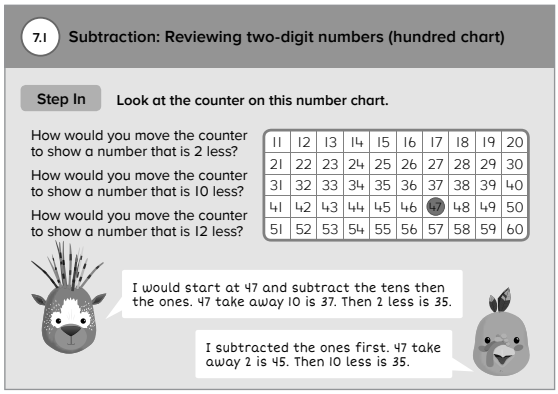
ORIGO STEPPING STONES 2.0

Core Focus

- Subtraction: One-digit numbers from two-digit numbers (bridging tens)
- Subtraction: Count-on and count-back to subtract
- Subtraction: Two-digit numbers from three-digit numbers (bridging hundred)
- 2D shapes

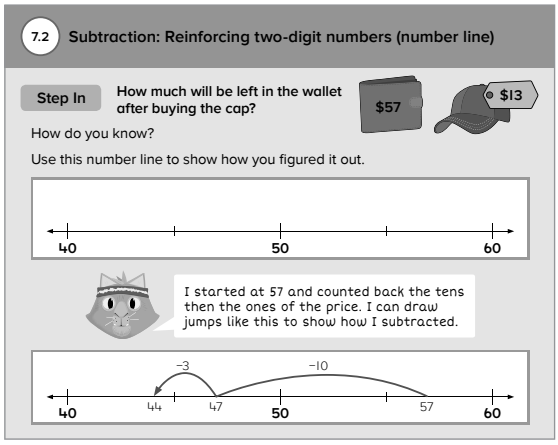
Subtraction

- Students now use subtraction to compare two amounts (e.g. “Marta has 12 pencils and Jeremy has 3. How many more pencils does Marta have than Jeremy?”).
- Answers to comparison subtraction problems can be solved by either counting on or counting back. The difference can be recorded in a subtraction sentence (12 - 3 = 9), or an addition sentence (3 + 9 = 12).



In this lesson, students count back the parts (tens and ones) to subtract two-digit numbers from two-digit numbers.

- Students also use a number line to show their thinking. E.g. students *see* 67 - 23 and *think* 67 - 20 - 3, or 67 - 3 - 20.

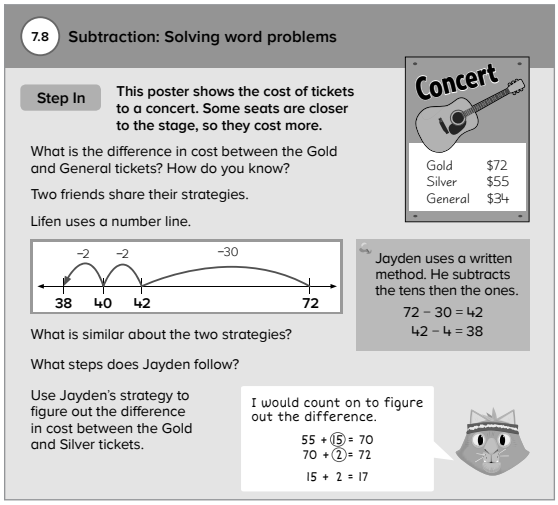


In this lesson, students count back the parts (tens and ones) on a number line.

Ideas for Home

- Counting back in tens or ones from any number is a key skill for subtraction. Take turns at naming a number between 51 and 99. Roll a standard number cube and count back that many tens or ones.
- Comparing the prices of similar items of food is a practical way to think about subtraction as comparison. Ask your child to find the difference between the prices of two similar items. Ask if they counted on or counted back, and to explain why.
- Knowing the combinations that make 10 (1 and 9, 2 and 8, 3 and 7, 4 and 6, 5 and 5) helps your child count on using a number line. Jumping to the next multiple of 10 is an efficient strategy. Ask, “How far from 63 to 70?” or “How far from 24 to 50?”

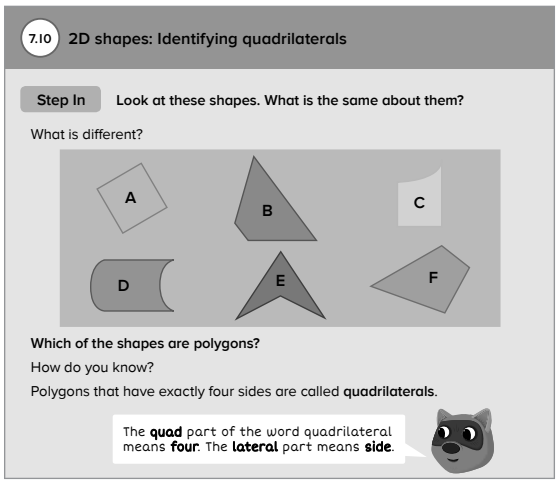
- When the number being subtracted is small (e.g. 65 - 12), it can be easier to count back. When the number being subtracted is large (e.g. 78 - 65), it can be easier to count on. Students may use the strategy that makes the most sense to them.
- Students make jumps of different amounts on the number line while solving problems. They also decide whether to first subtract the ones or the tens, depending on the numbers involved.



In this lesson, students choose and use a place-value strategy to subtract two-digit numbers.

2D shapes

- Students learn that polygons are **closed shapes** with sides that are all straight. They also learn that polygons have the same number of corners as they have sides, e.g. a quadrilateral has four sides and four corners.
- The sides and angles of a polygon do not have to be identical. An octagon can have all sides the same length (think of a stop sign) or different lengths.



In this lesson, students identify quadrilaterals as polygons that have exactly four sides.

Ideas for Home

- Children can easily count on or count back by ones, or use a known fact, to subtract when they do not need to bridge a multiple of ten (e.g. 68 - 5). However, counting past a multiple of ten can be difficult. Name any two-digit number with the ones place less than 5 and have your child subtract 7, 8, or 9 (e.g. "What is 73 take away 8?") Listen as your child explains how they solved the problem.
- Ask your child to look for shapes in the home and environment. Doors and windows are often rectangles, but look for other shapes, such as triangles, and shapes with more than 4 sides, such as hexagons and pentagons.
- Take turns at giving directions to draw shapes by naming the number of sides and corners, and whether the sides are the same length or have different lengths. E.g. say, "Draw a shape with five sides and five corners with different side lengths."

Glossary

- These are examples of some of the **closed shapes** that are taught in this lesson.