

## Subtracting Integers



The interactive white board tool for this lesson can be found on our website under Resources and Teacher Tools.

([www.dreambox.com/teachertools](http://www.dreambox.com/teachertools))

In this DreamBox lesson, students are sailing a pirate ship towards the buried treasure using given an algebraic equation. The number of clouds above the ship corresponds to the number of equations students can create to find the treasure. After each equation is created, the cloud will blow the ship to the correct spot and a treasure chest will appear. Students continue to create equations to reach the final destination of the treasure.

### Sample Lesson

**Objective** Students use a number line and only the subtraction operation to solve for a variable in start, change, or result unknown situations.

**Background** Students should have background knowledge in adding and subtracting fractions.

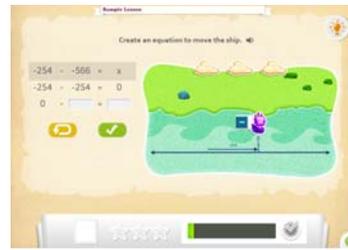
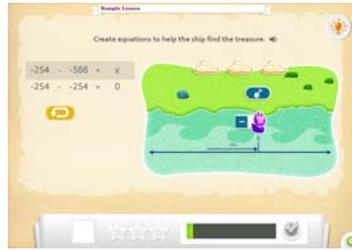
- Instructions**
1. Open the lesson on an interactive whiteboard or data projector and have students create equations to solve the given equation. Explain that the clouds represent the maximum number of equations they can use to solve the problem. The hint button is helpful if the students are struggling to create equations.
  2. Each student needs a partner to discuss their individual strategies and then choose one to present to the class. Students will write it on their individual white boards.
  3. Invite each pair to share their equation sequence and explain their strategy.
 

Possible strategies:

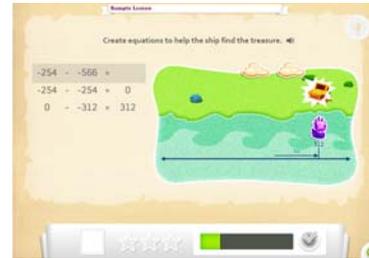
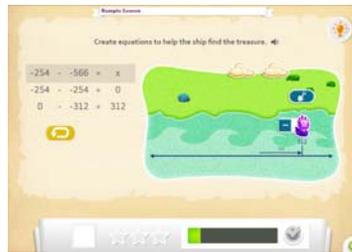
    - a) Students are able to reach the solution with one subtraction equation by mental math.
    - b) Students start by solving for 0 through subtraction and then moving to the solution using subtraction again. This will allow them to add the two numbers to find the solution.
    - c) Students use three or four subtraction combinations to reach the solution.
  4. By pressing the subtraction sign on the pirate ship, one student will enter the equation or set equations and check for accuracy



5. If the equations are not correct, have the class make suggestions on how to correct the equation. Then test the new theory.



6. Once the students has finished their sequence of equations, click on the X to determine they have reached the treasure.



7. Repeat the activity with more problems, giving multiple students an opportunity to share their answers and explanations.