

 Activity 10.14 CALCULATOR CHALLENGE COUNTING

Students press any three digit number on the calculator (e.g., 770), then $+$ 20. They say the sum before they press $=$. Then they continue to add 20 mentally, challenging themselves to say the number before they press $=$. They should see how far they can go before making a mistake.

The constant addend in this activity can be any number, even a three- or four-digit number. After 20 as your constant, try 25. Try 400 and then 480. As an added challenge, after a student has progressed through eight or ten counts, have the student reverse the process by pressing $-$ followed by the same number, and then pressing $=$ several times. Have students share their strategies for determining the sum or difference. Discuss patterns that appear.

From Van de Walle et. al. (2014). *Teaching Student-Centered Mathematics Grades: Developmentally Appropriate Instruction for Grades 3 – 5* (2nd Ed.). Toronto: Pearson Education, Inc. (p. 165).