

**Additional Practice****Investigation 4****Comparing and Scaling**

1. Kyle has maintained a consistent batting average of 0.350 on the Metropolis Middle School baseball team during the first half of the season. Assuming his batting average stays the same for the rest of the season, write and solve proportions to answer parts (a)–(d).
  - a. How many hits will Kyle make in his next 20 times at bat?
  
  
  
  
  
  
  
  
  
  
  - b. How many hits will Kyle make in his next 35 times at bat?
  
  
  
  
  
  
  
  
  
  
  - c. How many times at bat will it take Kyle to make 10 hits?
  
  
  
  
  
  
  
  
  
  
  - d. How many times at bat will it take Kyle to make 18 hits?
  
2. In a home-run derby contest after the little league baseball session had ended, Calvin hit 4 homeruns out of his 12 hits. Suppose Calvin's success rate stays about the same for his next 100 hits. Write and solve proportions to answer parts (a)–(d).
  - a. About how many homeruns will Calvin make out of his next 48 hits?
  
  
  
  
  
  
  
  
  
  
  - b. About how many homeruns will Calvin make out of his next 84 hits?
  
  
  
  
  
  
  
  
  
  
  - c. About how many hits will it take for Calvin to hit 8 more homeruns?
  
  
  
  
  
  
  
  
  
  
  - d. About how many hits will it take for him to make 36 more homeruns?

**Additional Practice** *(continued)***Investigation 4****Comparing and Scaling**

3. Find the value of  $x$  that makes the two ratios equivalent.
- 4 to 7 and  $x$  to 63
  - 4 to 7 and  $x$  to 87.15
  - 12 to  $x$  and 4 to 117
  - 12 to  $x$  and 15 to 45
  - 2 to 3 and 7 to  $x$
  - 23 to 115 and  $x$  to 15
4. The Elsie Dairy uses a machine that fills 28 cartons of milk an hour.
- How many cartons will be filled in 6.5 hours?
  - How long will it take to fill 343 cartons?
  - If the machine ran continuously for 10 days, how many cartons would it fill?
  - Write an equation that expresses the relationship between the number of cartons  $C$  and the number of hours  $H$ .