

#### Quiz 4

1. Convert 10 centimeters per second into inches per hour using  $1 \text{ inch} = 2.5 \text{ centimeters}$ . (Hint: Treat this as two separate problems. First convert centimeters per second to inches per second. Next, convert that answer to inches per hour.)
2. You have an initial population of 10 cells. The population triples every minute.
  - a. Model population as a function of time (in minutes).
  - b. What will the population be after 3 minutes?
  - c. Set up but do not solve an equation to determine the number of minutes required for the population to grow to 5000 cells.
3. Find an exponential function through the points  $(0, 4)$  and  $(2, 100)$ .