1. Every year, Rachel’s Aunt gives her money on her birthday. Rachel receives one dollar for each year of her age. For example, on her fourth birthday, Rachel gets $4, and on her eighth birthday, she gets $8.
   a. All together, how much money has Rachel gotten from her aunt once she has turned 10 years old?
   b. How old will Rachel be when she has received a total of $190 from her aunt?

2. Sheila’s flight from Los Angeles to New York departs at 8:12 AM. The flight will take 5 hours. The time in New York is 3 hours later than the time in Los Angeles.
   a. What time will it be in New York when Sheila’s airplane lands?
   b. Thirty minutes after the plane has landed, Sheila calls her friend in Los Angeles to let her know that the flight went well. What is the time in Los Angeles that Sheila’s friend received the call?

3. At the start of each soccer session, Lucy uses the diagram below to help her put lines on the soccer field. Her diagram is torn, and the key that connects length in the diagram to length on the actual field is missing. She knows that the longer sides of the actual soccer field are each 110 yards long.
   a. How much does one inch on the diagram represent on the actual field?
   b. What is the area of the actual field?

![Diagram of a soccer field with dimensions labeled in inches.](image-url)
4. A woman has some cookies. She sees a friend at the door and she quickly eats a cookie before her friend enters and takes one half of the remaining cookies. She sees another friend at the door and she quickly eats another cookie before the second friend enters and takes one half of the remaining cookies. Finally, she sees a third friend at the door and she quickly eats another cookie before the third friend enters and takes one half of the remaining cookies. At this point, the woman is left with only one cookie. How many cookies did the woman originally have?

5. Suppose that each worker at Pizza Hut makes 8 pizzas every half hour. Using this rate:
   a. How many pizzas will one worker make in 3 hours?
   b. How many pizzas will three workers make in 2 hours?
   c. How many pizzas will 6 workers make in 7 hours?
   d. How long will it take for 4 workers to make 48 pizzas?
   e. Three workers make pizzas for 3 hours. Two workers then go home and the remaining worker works for 5 more hours. How many pizzas will they have made?
PROBLEM 1 SOLUTION

**PROBLEM #1:** Every year, Rachel's Aunt gives her money on her birthday. Whatever age Rachel is turning, is how many dollars she receives. For example, on her fourth birthday, Rachel gets $4, and on her eighth birthday, she gets $8.

a. All together, how much money has Rachel gotten from her aunt once she has turned 10 years old?

b. Over the years, if Rachel received a total of $190 dollars from her aunt, what age is she?

**SOLUTION:**

a.

b.
PROBLEM 2 SOLUTION

PROBLEM #2: Sheila’s flight from Los Angeles to New York departs at 8:12 AM. The flight will take 5 hours. The time in New York is 3 hours later than the time in Los Angeles.
   a. What time will it be in New York when Sheila’s airplane lands?
   b. Thirty minutes after the plane has landed, Sheila calls her friend in Los Angeles to let her know that the flight went well. What is the time in Los Angeles that Sheila’s friend received the call?

SOLUTION:

   a. 

   b. 
PROBLEM #3: At the start of each soccer session, Lucy uses the diagram below to help her put lines on the soccer field. Her diagram is torn, and the key that connects length in the diagram to length on the actual field is missing. She knows that the longer sides of the actual soccer field are each 110 yards long.

a. How much does one inch on the diagram represent?
b. What is the area of the actual field?

**SOLUTION:**

a. 1 inch =

b. Area of field =
PROBLEM 4 SOLUTION

1. PROBLEM #4: A woman has some cookies. She sees a friend at the door and she quickly eats a cookie before her friend enters and takes one half of the remaining cookies. She sees another friend at the door and she quickly eats another cookie before the second friend enters and takes one half of the remaining cookies. Finally, she sees a third friend at the door and she quickly eats another cookie before the third friend enters and takes one half of the remaining cookies. At this point, the woman is left with only one cookie. How many cookies did the woman originally have?

SOLUTION:
PROBLEM 5 SOLUTION

PROBLEM #5: Suppose that a worker at Pizza Hut makes 8 pizzas every half hour. Using this rate…
   a. How many pizzas will one worker make in 3 hours?
   b. How many pizzas will three workers make in 2 hours?
   c. How many pizzas will 6 workers make in 7 hours?
   d. How long will it take for 4 workers to make 48 pizzas?
   e. Three workers make pizzas for 3 hours. Two workers then go home and the remaining worker works for 5 more hours. How many pizzas will they have made?

SOLUTION:

a.

b.

c.

d.

e.