

# MY Homework

## Lesson 3

### Problem Solving: Use Logical Reasoning

## Homework Helper



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A family has three guinea pigs. Tiger is 8 years old, which is 2 years older than Max. Max is 3 years older than Patches. List the guinea pigs from oldest to youngest.

### 1 Understand

#### What facts do you know?

Tiger is 8 years old.

Tiger is 2 years older than Max, and Max is 3 years older than Patches.

#### What do you need to find?

the ages of the guinea pigs from oldest to youngest

### 2 Plan

Use logical reasoning to find the age of each guinea pig. Make a table to help organize the information.

### 3 Solve

Place an "X" in each box that cannot be true.

You know that Tiger is 8 years old.

Subtract 2 from Tiger's age to find Max's age. Max is 6 years old.

Subtract 3 from Max's age to find patches age. Patches is 3 years old.

	oldest	2 <sup>nd</sup> oldest	youngest
Tiger	yes	X	X
Max	X	yes	X
Patches	X	X	yes

So, Tiger is the oldest, Max is the next oldest, and the youngest is Patches.

### 4 Check

#### Is my answer reasonable?

Since all of the answers match the clues, the solution is reasonable.



# Problem Solving

Solve each problem by using logical reasoning.

**Mathematical PRACTICE 5 Use Math Tools**

Mr. Toshi's fifth grade class sold containers of popcorn and peanuts. If each day they sold 25 fewer containers of peanuts than popcorn, how many containers of popcorn and peanuts did they sell in all? Complete the table and solve.

	Day 1	Day 2	Day 3	Day 4
Popcorn	225	200	150	300
Peanuts				

2. A shelter house has a floor area of 400 square feet. If three identical shelter houses are built, what is the combined floor area of the shelter houses?

3. Meghan has \$1.10 in dimes, nickels, and pennies. She has three times as many nickels as pennies, and the number of dimes is two less than the number of pennies. How many dimes, nickels, and pennies does she have?

4. Alana is 4 years older than her brother Ernie. Ernie is 2 years older than their sister Amelia. Amelia is 10 years younger than their brother Mazo. If Mazo is 17 years old, how old is Alana?

5. A rectangular garden measures 15 feet by 30 feet. What is the total area, in square yards, of the garden?



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