

Bar diagrams problems

For each of the word problems, draw one or more bar diagrams to help you solve and explain the problem (many of these are two step problems where it might make sense to draw separate diagrams for the separate parts of the problem solving process). Try to use a part-whole diagram for part-whole situations, and a compare diagram for compare situations. Make sure you label your bars in a way that would help you explain your solution. Complete the solution by computing and writing the answer. Try to put your final answer into a sentence.

1. Mom baked 18 cupcakes for the birthday party. After the party, there were 7 cupcakes left. How many cupcakes were eaten during the party?
2. Alex paid \$8 for a pizza. After the pizza, he had \$4 left. How much money did he have at first?
3. Kara made 15 paper cranes on Monday. On Tuesday, she made 4 fewer than she had made on Monday. How many paper cranes did she make in all?
4. There are 28 children in Mrs Triangle's class. 17 of the children are boys. How many more boys than girls are there in Mrs Triangle's class?
5. There are 84 red beads in the box. I have 3 times as many red beads as white beads. How many white beads are in the box?
6. There are 9 red balloons. There are 3 times as many blue balloons as red balloons. How many balloons are there altogether?
7. Melissa has 6 postcards. Sally has 3 times as many postcards as Melissa. How many more postcards does Sally have than Melissa?
8. Brian has 6 goldfish. He has 5 times as many guppies as goldfish. If he puts his guppies equally into 3 tanks, how many guppies are there in each tank?
9. Ryan bought 18 pencils. He bought twice as many pencils as pens. How much did he pay for the pens if each pen cost \$3?
10. There are 7 boxes of pens. Each box has 12 pens. Some of the pens are blue, and the rest are red. If there are 36 blue pens, how many red pens are there?