Bar diagrams to solve problems   name:_____

There are some ratio problems where you almost don't need a bar diagram:
1. There are 2/3 as many pens as pencils. There are 30 pencils, How many pens are there?

2. There are 3/4 as many cats as dogs. There are 12 cats. How many dogs are there?

3. The cookie dough as 2/3 as much sugar as flour. It has 1 1/4 cups of flour. How much sugar does it have?

4. The cookie dough as 2/3 as much sugar as flour. It has 1 1/4 cups of sugar. How much flour does it have?

There are some other ratio problems, where a bar diagram is *really useful*.
5. Amy and Bob share a plate of cookie. Amy gets 2/3 as many as Bob. If there are 30 cookies on the plate, how many do each get?

6. A package of stickers has stars and hearts. There are 2/5 as many stars as hearts. If there are 90 more hearts than stars, how many stars are there?