

Answers to Warm-Up Questions

1. What is 25% of 200?

25% of 200 is 50.

2. If 50% of a number is 75, what is the number?

The number is 150 because 75 is 50% of 150.

3. What percent of 140 is 105?

105 is 75% of 140. Try checking this on the model if you aren't sure. If you divide 140 into 4 equal parts, each one will be 35. 3 out of the 4 parts makes 75% and 3 groups of 35 is 105.

4. What is 75% of 116?

75% of 116 is 87. This is hard to see exactly on the model, but you can find it by dividing 116 by 4 to get 25% of it and then multiplying that by 3 to get 75% of it. 25% of 116 is 29. $29 \times 3 = 87$.

5. If 75% of the people in a group wear glasses, what percent of the people do not wear glasses?

25% of the people do not wear glasses. Since the whole group is 100%, if you take away the 75% who wear glasses, you will be left with 25% who do not.

6. If you get a 25% discount on a gym membership that normally costs \$200, how much do you pay for it?

You will pay \$150. 25% of \$200 is \$50. Taking that away from the original price leaves \$150.

7. There were 8 students enrolled in a math class. Then enrollment went up by 75%. How many students are there now?

There are now 14 students in the math class. Here's one way you might have thought about this:

Divide 8 by 4 to get 25% of it. 25% of 8 is 2.

Multiply that by 3 to get 75% of 8. 75% of 8 is 6.

Add that on to the 8 because the enrollment went up by 75%. $8 + 6 = 14$.