

**QUESTION** **1** **Mathematical problem**  
Giovanni is a carpenter who makes tables and chairs. He has 100 pieces of wood which he uses to make tables and chairs. Each table needs 4 pieces of wood and each chair needs 3 pieces of wood. How many tables and chairs can he make?

**Solution** **1** **1** Giovanni got 100 pieces of wood and 30 pieces of wood to make a chair. The got 40 pieces of wood which is enough to make 10 tables. Now with 30 pieces of wood he can make 10 chairs.



It is very common that carpenters do not have enough wood to build their furniture. Therefore it would be useful to calculate how much wood they have left.

**QUESTION** **2** **Mathematical problem**  
An architect is designing a building. The architect wants to make the roof of the building with a slope of 1:3. This means that for every 1 unit of height, there will be 3 units of length along the roof. The roof of the building is 10 units high and the area of the roof is 120 square units. What is the area of the roof?

**Solution** **2** **1** The roof of the building is a triangle. The area of a triangle is given by the formula:



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