Building Treehouse

A secret agent has to solve a series of tasks- but needs your math skills to complete them.

The agent estimates the tree to be around 4.5 metres high. His ladder is only long enough to reach half way.

How high will the ladder be able to reach?

The agent has 10 boards to build the base.

What is the mass of 10 boards if 1 board has a mass of 1.25 kg?

(1.25x10=125.0kg / 1.25x10=12.5kg)

The agent needs a little more lumber to build the treehouse. It is 1.8 km to the lumberyard.

How far is the round trip, expressed in kilometres?

The agent needs 12 more pieces of wood to build the treehouse.

If each piece of wood costs $18.99, how much will 12 pieces of wood cost?

The agent also needs nail, paint, and a door for his treehouse. Can you help him estimate the total bill?

Wood: $227.88

Nails: $8.88

Paint: $101.01

Door: $148.60

The agent’s total bill for all the building material was $486.37.

If he had $500.00, how much money does he have left?

Finally, the agent needs to build the treehouse, but first he has to carry the materials up the tree. He can carry up to 20 kg of materials at a time. If he has 200 kg of materials, how many trips will he have to make?