

Exercise 2

Imagine you are the owner of a small construction company, which specializes in masonry and brick laying. You have been asked to create a spreadsheet to help you create a bid for a private customer who would like a wall to enclose part of their estate. You offer them two options – natural rock or brick.

Currently, you are working on the following bid:

A crew of two workers will work three eight-hour days to build either type of wall. The wall will be 20 feet long, 6 feet tall, and 2 feet thick. Wages will be \$10 per hour per person. You will have to add 20% to wages to cover fringe benefits. Natural rock will cost \$3 per cubic foot. Brick will cost \$2 per cubic foot. Your bid must add a profit margin of 30% to your total cost.

You are expected to design a spreadsheet for the two options specified above, but your model should be able to be (re) used for futures bids. If, for example, the customer specifies a new size of wall, your spreadsheet should be able to accommodate those changes and automatically provide a recalculated bid. (You should assume that you will be able to accommodate changes in all numerical parameters specified above.) In addition, you are expected to avoid any redundancy in your model. For example, all parameters, which are applicable for both options, should be used only once.

Please Note:

A bid is a price quote, estimate, or offer. You are to create a spreadsheet model for each option (natural rock or brick) indicating a bid, which covers all costs and takes into account an overall 30 % profit margin.

Do not put your name by hand. Add your name to the spreadsheet Header, which should also display the file name (after the specification **File:**) and the printing time (date and hour). Your name should be displayed at the left side and the printing time on the right.