

Paint Store
Math 184 Section 921 - 12 May 2011

Group Names and Student Numbers:

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- 2.
- 3.

There is a special paint store with only one size of bucket that will sell exact amounts of paint, meaning they will partially fill a bucket to your exact specifications (for example, you could buy 1.34L of paint, or 1.345623L of paint). Each bucket can hold a maximum of 5L and costs \$6.00, while the paint costs \$10.00 per litre. (Assume we are only buying one colour of paint, and that there is a large fine for not using all of our paint, so that we always want to buy the exact amount of paint and no extra.)

Task 1: Draw a graph that represents the minimum cost for a range of 0L up to 12L.

Task 2: Suppose the store also offers full, sealed buckets of exactly 5L of paint for a special price of \$40 (since they do not require the careful filling time of the partial buckets), but you can still purchase partially-filled buckets as well at the same prices as before. Draw a graph for the same range of 0L to 12L.