# Farmer's Fields

I can solve a problem involving perimeter and area.

Farmer Fred has calculated that he needs to have a field with an area of 30 square metres to put his goat in. He wants the field to be a square or rectangle shape. The fencing for his field costs £4 a metre (it is only sold in whole metres) and the special turf he is buying is £6 per square metre. Which shape field will be the cheapest for him? Use squared paper and a table to help.

| Length | Width | Perimeter | Cost (Turf + Fencing) |
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The field which would cost Farmer Fred the least would have these dimensions:

| length: | m | width: | m |
|---|---|---|---|

# Farmer's Fields **Answers**

| Length | Width | Perimeter | Cost (Turf + Fencing) |
|---|---|---|---|
| 30 | 1 | 62m | £180 + £248 = £428 |
| 15 | 2 | 34m | £180 + £136 = £316 |
| 10 | 3 | 26m | £180 + £104 = £284 |
| 6 | 5 | 22m | £180 + £88 = £268 |

The field which would cost Farmer Fred the least would have these dimensions:

| length: | 6m | width: | 5m |
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