Chart, line chart

Description automatically generated

a

1. Estimate the value of using your graph.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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1. Use a calculator to work out the value of , correct to one decimal place.

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1. Complete the table below, correct to one decimal place.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **0** | **15** | **30** | **45** | **60** | **75** | **90** |
|  |  |  |  |  |  |  |  |

1. Hence, draw the graph of on the diagram above, using the same axis and scale.
2. Use your graph to find the value of x, for which .

**Extension:**

Both functions have the same outputs for different values of x. What relationship is there between these x-values?