

Read and Highlight the notes below...

Continuous and Discrete Graphs

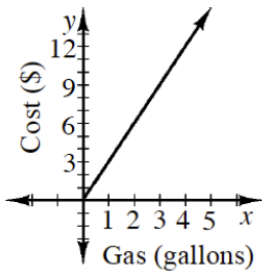
When the points on a graph are connected, and it *makes sense* to connect them, the graph is said to be **continuous**. If the graph is not continuous, and is just a sequence of separate points, the graph is called a **discrete graph**. For example, the graph below left represents the cost of buying x shirts, and it is discrete because you can only buy whole numbers of shirts. The graph farthest right represents the cost of buying x gallons of gasoline, and it is continuous because you can buy any (non-negative) amount of gasoline.

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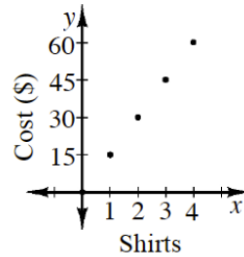
Continuous and Discrete Graphs

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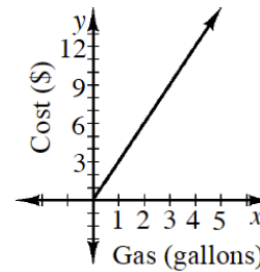
Continuous Graph



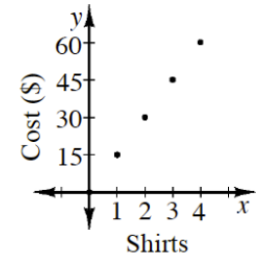
Discrete Graph



Continuous Graph



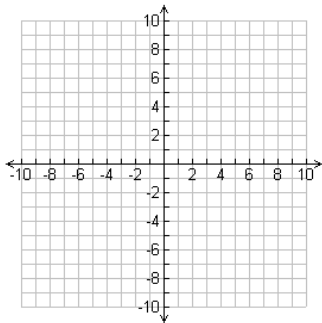
Discrete Graph



Complete the problems/graphs below:

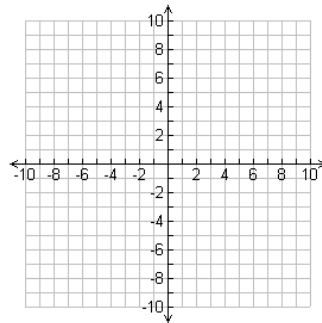
When in the form $y=mx+b$ graphs are drawn as continuous graphs.

Draw the graph of $y=3x+5$ below.



When in the form $t(n)=mn+b$ graphs are sequences and drawn as discrete graphs (with just points).

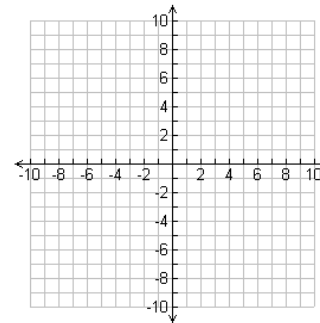
Draw the graph of $t(n)=2n-3$ below.



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