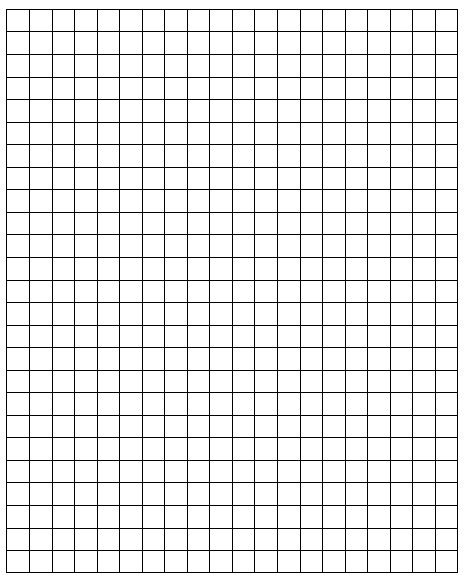
**Transforming Parabolas**

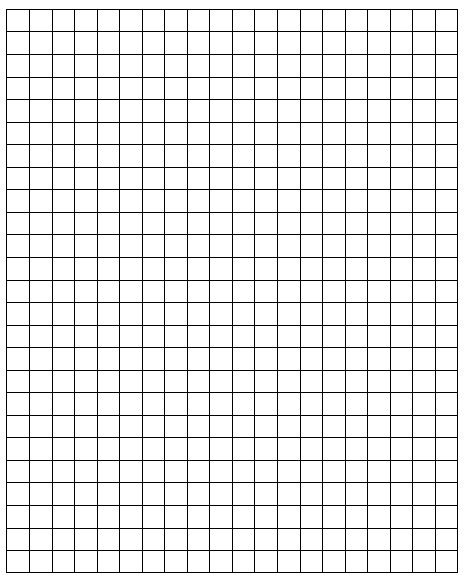
1. a) plot the graph of on the grid below. Your -axis should go from -10 to 10 and your -axis should go from -5 to 20. Label your curve.



b) plot the graph of on the same grid above. Label the curve.

c) Describe the transformation (what is the difference between the two graphs?).

1. Plot and label another graph of on the grid below.



b) plot and label the graph of on the grid above.

1. Describe the transformation (what is the difference between the two graphs?).
2. Discuss with your partner:
   * What would you expect the graph of to look like? Draw a sketch, showing the coordinates of the minimum point.
   * What would you expect the graph of to look like? Draw a sketch, showing the coordinates of the minimum point.
   * What would you expect the graph of to look like? Draw a sketch, showing the coordinates of the minimum point.
3. Discuss with your partner:
   1. What would you expect the graph of to look like? Draw a sketch, showing the coordinates of the minimum point.
   2. What would you expect the graph of to look like? Draw a sketch, showing the coordinates of the minimum point.
   3. What would you expect the graph of to look like? Draw a sketch, showing the coordinates of the minimum point.
4. Discuss with your partner:
   1. What would you expect the graph of to look like? Draw a sketch, showing the coordinates of the minimum point.
   2. What would you expect the graph of to look like? Draw a sketch, showing the coordinates of the minimum point.
   3. What would you expect the graph of to look like? Draw a sketch, showing the coordinates of the minimum poin
5. Discuss with your partner:
   1. What would you expect the graph of to look like? Draw a sketch, showing the coordinates of the minimum point.
   2. What would you expect the graph of to look like? Draw a sketch, showing the coordinates of the minimum point.
   3. What would you expect the graph of to look like? Draw a sketch, showing the coordinates of the minimum point.