Al-Khwarizmi’s geometric algebra

PRACTICE WORKSHEET

Name: _____ Date: _____

Show your working in the blank space or on separate paper. Sketch labelled rods/beads when asked to represent a number.

1 Solve $x^2 + 10x = 39$ for the positive length x.

2 Solve $x^2 + 10x = 96$ for the positive length x.

3 Solve $x^2 + 10x = 39$ for the positive length x.

4 Solve $x^2 + 10x = 144$ for the positive length x.

5 Solve $x^2 + 10x = 75$ for the positive length x.

6 Solve $x^2 + 10x = 24$ for the positive length x.

7 Solve $x^2 + 10x = 119$ for the positive length x.

8 Solve $x^2 + 10x = 56$ for the positive length x.

9 Solve $x^2 + 16x = 225$ for the positive length x.

10 Solve $x^2 + 16x = 132$ for the positive length x.

11 Solve $x^2 + 16x = 57$ for the positive length x.

12 Solve $x^2 + 16x = 192$ for the positive length x.

Practise interactively and explore the method:

https://goofergames.com/math/world/al-khwarizmi

Free for educational use: teachers may print and share the worksheets with their students.