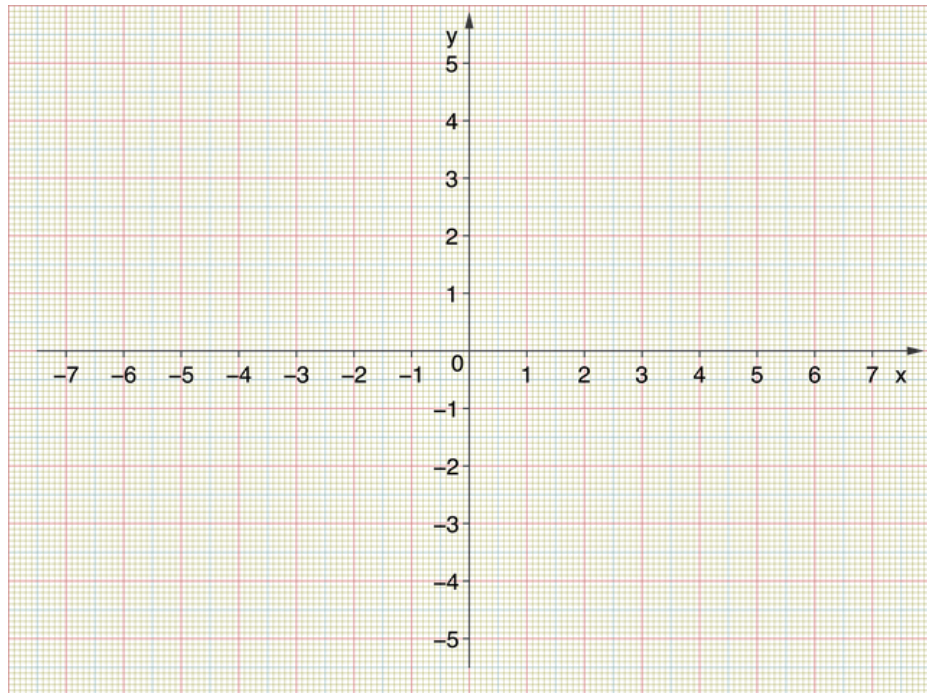1.   Plot these two lines on the same axis by hand.

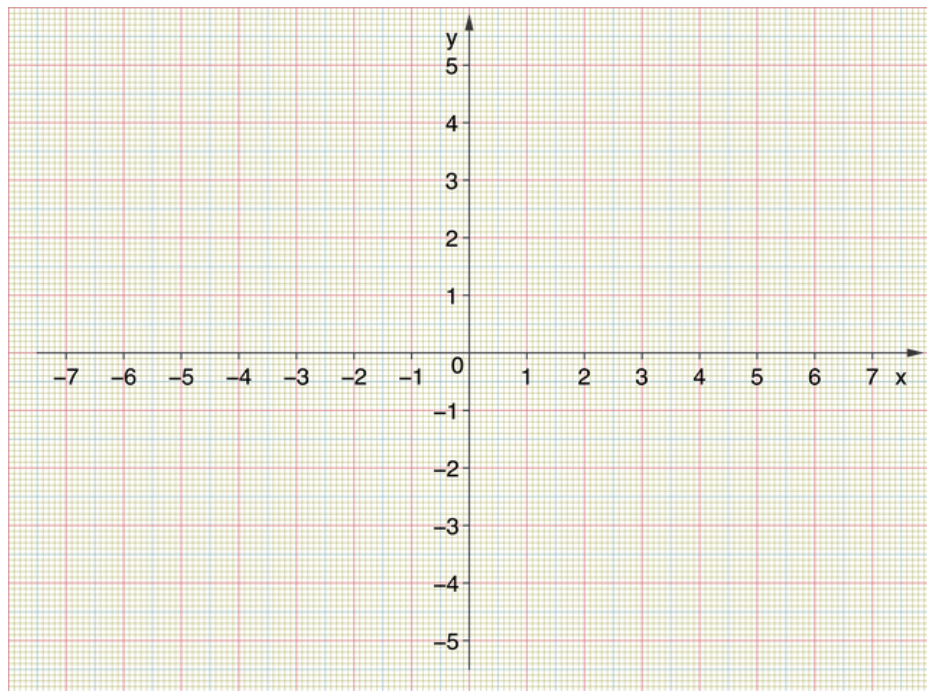a) $y = 2x + 4$

b) $x = 2y + 4$

2. Plot these three lines with a computer. Sketch below.

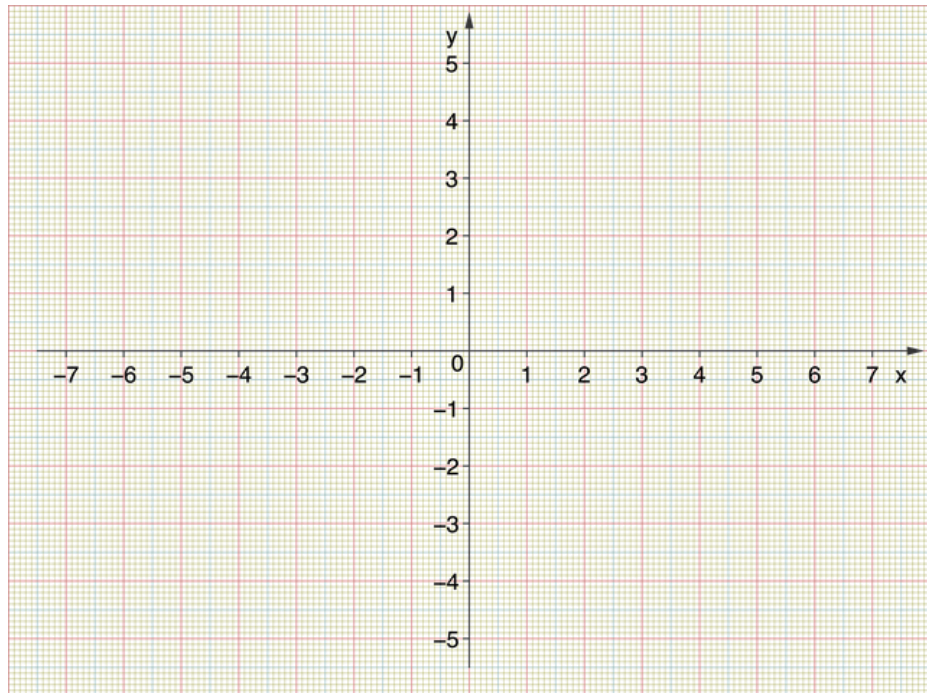a) $y = 2x + 4$

b) $x = 2y + 4$

c) $y = x$

3.   Plot these three lines with a computer. Sketch below.

a) $y = \frac{1}{3}x + 1$
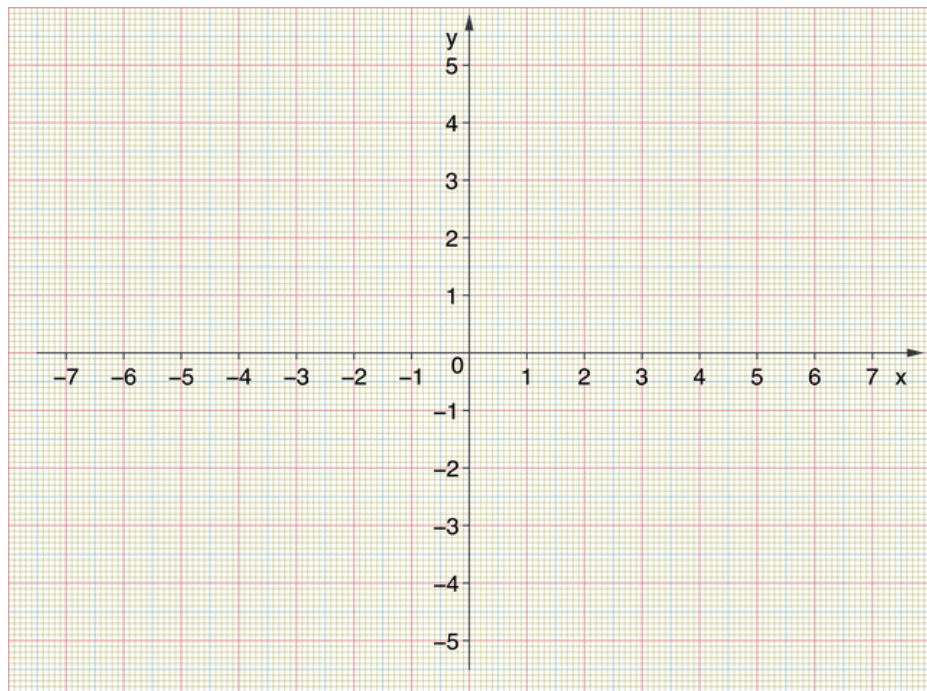
b) $x = \frac{1}{3}y + 1$

c) $y = x$

4.   Plot these four lines with a computer. Sketch below.

a) $x = 2$

b) $x = -2$

c) $y = 2$

c) $y = -2$

5. Plot these eight lines on the same axis with a computer. What shape is inscribed?

  y = x + 4   y = x − 4   y = -x + 4   y = -x − 4

  y = 3   y = -3   x = 3   x = -3

6. $y = x^2$

  a) As x gets really big or really negative, what happens to y?

  b) Can y ever be negative?

  c) Plot it with the computer. Freehand it below.
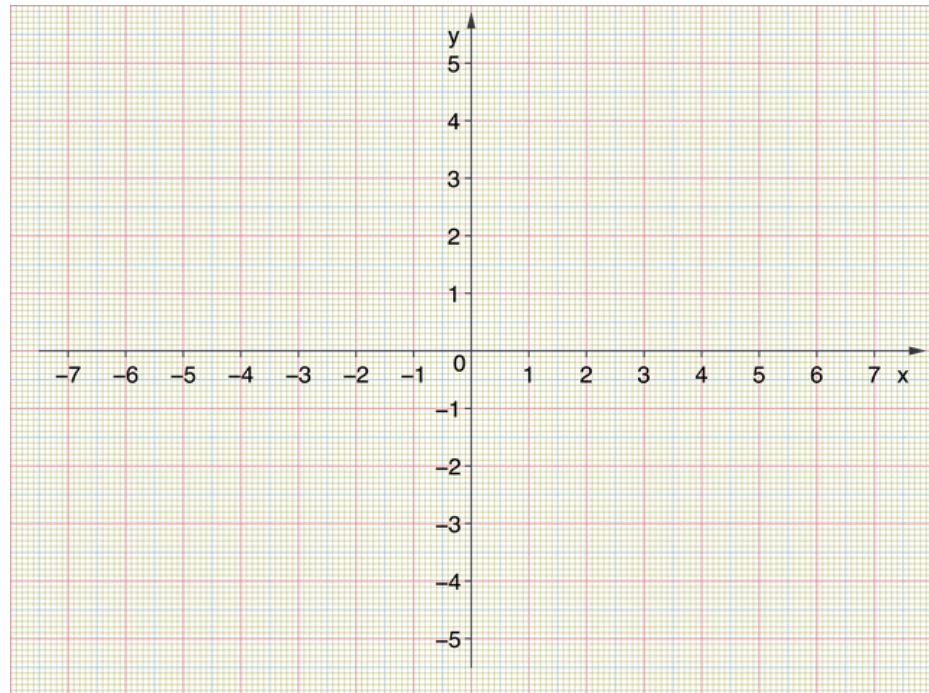
  d) What do you think $x = y^2$ would look like?

7. Plot these three equations with a computer. Sketch below.

a) $y = x^2$

b) $x = y^2$

c) $y = x$

8. Plot these three equations with a computer. Sketch below.

a) $y = -x^2$

b) $x = -y^2$

c) $y = x$