**Quadratic Equation Worksheet**

Complete the following worksheet using Geogebra

Draw the following equations and use the graphs to find the roots

(i) y = 2x2 + 11x – 13 (ii) y = x2 – 4x – 5 (iii) y = 3x2 + 8x – 13

   

Roots: \_\_\_\_\_\_ \_\_\_\_\_\_\_\_ Roots: \_\_\_\_\_\_ \_\_\_\_\_\_\_\_ Roots: \_\_\_\_\_\_ \_\_\_\_\_\_\_\_

**Investigation**

Every quadratic has the general formula y = ax2 +bx + c

(i) Investigate what happens if:

 “a” is increased “b” is increased “c” is increased

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(ii) Investigate what happens if

 a = 0 b = 0 c = 0

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Investigate what happens if:

 a < 0 b < 0 c < 0

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Any other observations?

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