Surds

* Students are to work in teams of 2 or 3.
* Give a blank copy of the 4 quadrants sheet (or they could make their own!) and one starter number from set A or B to each team. The numbers you give out need not be all different – in fact all teams could be given the same number.
* Their task is to complete the quadrant with any number they can think of which, when added to/subtracted from/multiplied by/divided by their original irrational number, would make a rational answer.
* When they have (or think they have!) finished give them a starter number from set B (if they had a set A number first) or C (if they had a set B number first). They are to complete the same task on a new 4 quadrants sheet.
* When the class have made a good attempt at both activities, pair up the teams and ask them to present their work to each other. Encourage the discussion of answers. Teams are allowed to improve their work based on their discussion (they may either cross incorrect answers out or include missing responses).
* The work could be displayed in the classroom for future reference.

An example of what an attempt at this task might look like this:

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Starter Numbers – Set A



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Starter Numbers – Set B

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Starter Numbers – Set C

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