

# Basic Math - Second lesson Homework

Caboara

## 1 Homework

We want to know the number of real roots of

1.  $p_1(x) = x^3 + x + 3$  [Answer:1]

2.  $p_2(x) = 2x^3 - x^2 - 2$  [Answer:1]

3.  $p_3(x) = x^4 - x - 2$  [Answer:2]

4.  $p_4(x) = x^4 - x^3 - 1$  [Answer:2]

5.  $p_5(x) = x^5 - x - 1$  [Answer:1]

6.  $p_6(x) = x^{16} - 1$  [Answer:2]

7.  $p_6(x) = x^{17} - 1$  [Answer:1]

Solve at least three exercises and send your solutions, with all the computations step by step, by email to [massimo.caboara@unipi.it](mailto:massimo.caboara@unipi.it) *WITH FCS IN THE MESSAGE SUBJECT*, and *NO LATER THAN TUESDAY EVENING*