

Latex Assignment8

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1 Ex 10.4.4

1. Find the nature of the roots of the following quadratic equations. If real roots exist, find them:
 - (i) $2x^2 - 3x + 5 = 0$
 - (ii) $3x^2 - 4\sqrt{3}x + 4 = 0$
 - (iii) $2x^2 - 6x + 3 = 0$
2. Find the values of k for each of the following quadratic equations, so that they have equal roots:
 - (i) $2x^2 = kx - 3 = 0$
 - (ii) $kx(x - 2) + 6 = 0$
3. Is it possible to design a rectangular mango grove whose length is twice its breadth, and the area is $800m^2$? If so, find its length and breadth.
4. Is the following situation possible? If so, determine their present ages.
The sum of the ages of the two friends is 20 years. Four years ago, the product of their ages in years was 48.
5. Is it possible to design a rectangular park of perimeter 80m and area of $400m^2$. If so, find its length and breadth.