High School Math Problems
2016
Week 24
Problem and Solution

For what values of the parameter p does the equation $pt^2 - 4t + 1 = 0$ have no real solution?

Solution:

The discriminant of the equation is

$$D = 4 - p,$$

where we are using the reduced quadratic formula from Week 18 of 2015.

The equation, then, will have no solution when

$$D = 4 - p < 0$$
$$p > 4.$$

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