

Week 78 (3/8/04)

**Infinite square roots**

Find the value of

$$\sqrt{1 - \sqrt{\frac{17}{16} - \sqrt{1 - \sqrt{\frac{17}{16} - \sqrt{1 - \dots}}}}}$$

Assume, when taking the limit, that deep within the nested square roots we choose to begin with a “1” (starting with a “17/16” would yield a complex number).