

**JHMT 2013 Algebra Test  
SOLUTIONS**

**Problem 1.** 15

**Problem 2.**  $\frac{1 + \sqrt{13}}{2}$

**Problem 3.** 8960

**Problem 4.** 168

**Problem 5.**  $\frac{546}{5}$

**Problem 6.**  $\frac{25}{4}$

**Problem 7.**  $6, \frac{-1 \pm \sqrt{13}}{2}$

**Problem 8.**  $-11/3$

**Problem 9.**  $\frac{-\sqrt[3]{4} + 7\sqrt[3]{2} - 3}{23}$

**Problem 10.**  $-\frac{3}{20}$