

Never Stand Still

Faculty of Science

School of Mathematics and Statistics

Solution Sheet 15, September 3, 2012

Answers

- 1. 18
- 2. $\sqrt{2}$
- 3. Hint: find 8 right angled triangles.
- 4.
- 5. (a) $\frac{1}{6} + \frac{1}{6} + \frac{1}{7}, \frac{1}{6} + \frac{1}{5} + \frac{1}{15}, \frac{1}{6} + \frac{1}{4} + \frac{1}{13}, \frac{1}{5} + \frac{1}{5} + \frac{1}{11}, \frac{1}{5} + \frac{1}{4} + \frac{1}{21}$
 - (b) Similar to the above. Start with a=b=c=4 and find the smallest value of d such that $\frac{1}{a}+\frac{1}{b}+\frac{1}{c}+\frac{1}{d}<1$