(Math 170) Homework 8:

Due November 13, 2008

Exercise 1: What is $0.\overline{101}$ base 2 as a fraction base 10? What is $0.\overline{101}$ base 4 as a fraction base 10? What is $0.\overline{101}$ base 8 as a fraction base 10?

Exercise 2: Express $2 + \frac{1}{2}$ as a fraction? Express $2 + \frac{1}{2+\frac{1}{2}}$ as a fraction?

Exercise 3: Express $2 + \frac{1}{2+\frac{1}{2+\frac{1}{2}}}$ as a fraction? Express $2 + \frac{1}{2+\frac{1}{2+\frac{1}{2+\frac{1}{2}}}}$ as a fraction?

Exercise 4: Heart of Mathematics Chapter 2.2 Exercise 4

Exercise 5: Heart of Mathematics Chapter 2.2 Exercise 28

Exercise 6: Heart of Mathematics Chapter 2.2 Exercise 30

Exercise 7: Heart of Mathematics Chapter 2.7 Exercise 26

Exercise 8: Heart of Mathematics Chapter 2.7 Exercise 39

Exercise 9: Heart of Mathematics Chapter 2.7 Exercise 40