## **Worksheet 3.3 Extra Practice**

**1.** Fill in the blanks.

The first step in estimating the square root of a number that is not a perfect square is to think of the \_\_\_\_\_\_ less than and greater than the number.

**2.** Complete the table. The first row is done for you.

Number	Perfect Square Less Than the Number & its Factors	Perfect Square Greater Than the Number & its Factors	Perfect Square Number Is Closer To	Estimate the Square Root	Check in square root Calculator (nearest thousandth)
33	25 = 5x5	36 = 6x6	36	√33	5.745
11					
47					
6					
70					
116					

3. Complete the table.

	Perfect Square Less Than the Number	Perfect Square Greater Than the Number	Perfect Square Number Is Closer To	Estimate	<b>Check</b> (nearest thousandth)
$\sqrt{14}$					
√38					
√140					
√94					

- **4.** Identify all of the possible whole numbers with a square root greater than 3 and less than 4.
- **5.** The square has an area of 10 cm<sup>2</sup>.



**a)** Use perfect squares to estimate the side length of the square, to one decimal place. Show your work.

**b)** Use a ruler to measure the side length of the square, to the nearest tenth of a centimetre. \_\_\_\_\_