

Section 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.

Number	Perfect Square Less Than the Number	Perfect Square Greater Than the Number	Perfect Square Number Is Closer To
33	25	36	36
11			
47			
6			
70			
116			

3. Estimate the square root of each number in #2. Then, check your answers with a calculator. Express your answers to one decimal place.

	Estimate	Check
a) $\sqrt{33}$	_____	_____
b) $\sqrt{11}$	_____	_____
c) $\sqrt{47}$	_____	_____
d) $\sqrt{6}$	_____	_____
e) $\sqrt{70}$	_____	_____
f) $\sqrt{116}$	_____	_____

Name: _____

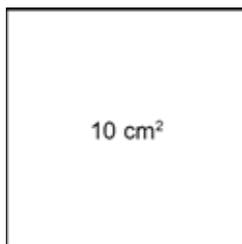
Date: _____

4. Estimate the square root of each number. Then, check your answers with a calculator. Express your answers to one decimal place.

	Perfect Square Less Than the Number	Perfect Square Greater Than the Number	Perfect Square Number Is Closer To	Estimate	Check
a) $\sqrt{14}$	_____	_____	_____	_____	_____
b) $\sqrt{38}$	_____	_____	_____	_____	_____
c) $\sqrt{140}$	_____	_____	_____	_____	_____
d) $\sqrt{94}$	_____	_____	_____	_____	_____

5. Identify all of the possible whole numbers with a square root greater than 3 and less than 4.

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6. The square has an area of 10 cm^2 .



- 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. _____