

Name \_\_\_\_\_

Date \_\_\_\_\_

## Exact Square Root Word Problem Worksheet 1

James wants to buy a new rug for his living room. In a department store he finds a square rug that has an area of  $9 \text{ m}^2$ .

1. How long is each side of the rug?
2. How many of those rugs are needed to cover an area of 36 square meters?
3. If the room has a square area of 16 square meters and the rug is placed in the middle of the room, how much space would there be between each side of the rug and the wall?

Jessica has a square picture with an area of 900 square inches.

4. How long is each side of the picture? (in inches)
5. How many centimeters would that be? (1 inch = 2.54 cm)
6. If each side was 2 inches longer, what would the area of the picture be?



The Smiths want to fence their square garden, which has an area of 256 square meters.

7. How long is each side of the garden?
8. If one side of the garden borders the house and therefore doesn't need a fence, how many meters of fence are necessary?
9. The fence is built of wooden square parts that have an area of 4 square meters each. What length does one part cover?
10. How many of those parts are needed to fence the garden?

