

## Word Problems with Square Roots

1. You have a square blanket that has an area of 1600 square inches. What is the length of 1 side of the blanket?

2. A square coffee table has an area of 196 square inches. What is the length of one side of the coffee table

$$A = 196 \text{ in}$$

3. You have a square flower garden that has an area of 400 square yards. What is the length of one side of the garden?

4. A square desktop has an area of 324 square inches. What is the length of one side of the desktop?

$$A = 324 \text{ in}^2$$

5. You want to carpet a square room that has an area of 144 square feet. What is the length of one side of the room?

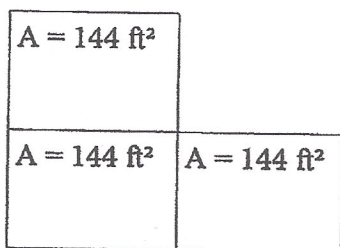
6. You are going to decorate one wall of your bedroom by putting border along the top. The wall is a square wall with an area of 256 square feet. What is the length of border you need for the top of this on wall?

7. To the nearest tenth, what is the square root of 33?

8. The area of a square tile is 50 square centimeters. To the nearest tenth of a centimeter, how long is one side of this tile?

$$A = 50 \text{ cm}^2$$

9. Jason's square bedroom has an area of 90 square feet. The length of one side of his room is between what two whole numbers?
10. Grandma's square garden has an area of 90 square feet. The length of one side of her garden would be between what two whole numbers? What is the length of this side to the nearest tenth of a foot?
11. A square place mat has an area of 169 square inches. Sally decides to decorate the place mat by putting fringe around the edges. How many inches of fringe will Sally need to buy? How many feet is this?
12. The diagram below shows Sam's backyard divided into three square areas. If Sam only wants to fence the outside edge to make one big back yard, how much fencing will he need to buy?



13. The Dotson family built a square deck with an area of 65 square meters. The length of one side is between what two whole numbers?
14. To the nearest tenth, what is the square root of 89?
15. A rancher divided his land into square sections. One large section has an area of 112 square miles. To the nearest tenth of a mile, what is the length of one side of this tract of land?