

1. A square lot containing 5476 sq. rd. of land is how long?
2. How long is a square field containing 34,596 sq. ft.? containing 1 A. 31,516 sq. ft.? containing 6 A.?
3. How long and wide is a rectangular piece of land containing $\frac{1}{2}$ of an acre, whose length is twice its breadth?
4. How far must a piece of land 8 rods square be extended to contain 2 acres.
5. A rectangle is 468 ft. long, 138 ft. wide. Find the side of a square which has the same area.
6. How many more feet of fence will it take for a rectangular lot 42 rd. long, 28 ft. wide than for a square lot of the same size?
7. If it takes 21,904 blocks 8 inches square to pave a square courtyard, how many blocks on each side, and how large is the courtyard?
8. How many paving-stones 9 inches square will it take to pave a court containing 53,824 sq. ft.?
9. The sides of three squares are 6 in., 8 in., and 10 in. respectively. What is the length of one side of a square that is equal in area to the three squares?
10. Find the dimensions of a floor which contains 384 sq. ft., and whose length and width are as 3 to 2.
11. I have a half-acre lot of land whose width is $\frac{3}{4}$ of its length. How far from centre to centre must the posts of a fence be set that will give panels of equal length as nearly as possible to 12 ft. long?
12. How many rods of fence will be required to inclose 6 acres of land, if the ratio of width to length is as 1 to 4?
13. The difference of the squares of two numbers is 136. If each number is increased by 2, the difference of their squares will be 152. What are the numbers?
14. What will it cost to fence a 10-acre field which is in the form of a square, panels 10 ft. long, 4 rails to the panel, posts costing \$15 a hundred, rails \$5 a hundred, two men working 14 days each at \$1.75 a day?
15. A cistern 6 ft. deep holds 1240 gallons. What are the other dimensions if the width is equal to the length?