

Unit 2: Area and Multiplication

ADVANCED · SET 3

Name: _____ Date: _____

Solve each problem and write one short exact answer on the line — show your multiplication work in the space beside it.

1. A reading-corner rug is made of two rectangles pushed together. The big part is 7 feet by 6 feet. The small part is 4 feet by 5 feet. What is the total area of the rug, in square feet?

Answer: _____

3. Leo tiles a rectangle that is 7 unit squares tall and 14 unit squares wide. He breaks it into a 7×10 part and a 7×4 part. How many unit squares cover the whole rectangle?

Answer: _____

5. A kitchen floor is 12 feet long and 9 feet wide. It is covered with 1-foot square tiles, except for a 3-foot by 4-foot spot where the stove sits. How many tiles cover the floor?

Answer: _____

7. A flag is 7 inches long and 5 inches tall. A bigger flag has the same height but double the length. What is the area of the bigger flag, in square inches?

Answer: _____

9. A mosaic must have an area of exactly 36 square centimeters, and its side lengths must be whole centimeters. A 4 by 9 mosaic counts as the same shape as a 9 by 4 mosaic. How many different rectangles are possible?

Answer: _____

2. A bakery cools cookies on a rectangular tray with an area of 126 square inches. One side of the tray is 9 inches long. How long is the other side, in inches?

Answer: _____

4. Ana's garden bed is 9 meters by 7 meters. Ben's garden bed is 8 meters by 8 meters. How many more square meters does the larger bed have?

Answer: _____

6. A rectangular dog pen has an area of 48 square yards. It is 6 yards wide. How many yards of fence are needed to go all the way around the pen?

Answer: _____

8. A wall mural is 6 feet tall and 9 feet wide. Paint costs 2 dollars for each square foot covered. How many dollars does the paint cost?

Answer: _____

10. A hallway floor is 8 feet by 6 feet. It is covered with square tiles that each measure 2 feet by 2 feet, with no gaps. How many tiles are used?

Answer: _____

11. Maya has 100 square inches of felt. She cuts out 3 rectangular patches, and each patch is 4 inches by 7 inches. How many square inches of felt are left over?

Answer: _____

12. A quilt is 8 feet by 9 feet. Mia says a quilt that is 6 feet by 12 feet covers the same area. Is Mia right? Answer yes or no.

Answer: _____