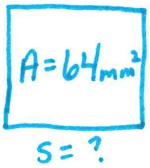
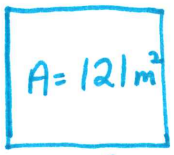
Squares and Square Roots - Worksheet #2

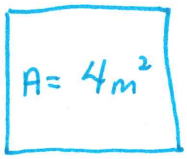
1. What is the area of a square with the following side lengths?

a) 17m b) 9km c) 20cm

2. What is the sidelength for each of the squares shown below?

a) 

b) 

c) 

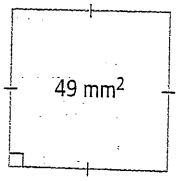
3. What is the square of each number?

a) 20 b) 16 c) 10

4. What is the value of each of the following:

a) $\sqrt{625}$ b) $\sqrt{64}$ c) $\sqrt{49}$

16. What is the side length of the square shown?

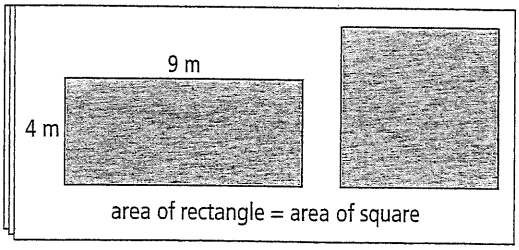


17. A fridge magnet has an area of 54 mm². Is 54 a perfect square?

18. A floor mat for gymnastics is a square with a side length of 14 m. What is the area of the floor mat in square metres?

19. The gym teacher told the students to run twice around the perimeter of the school field. The area of the square field is 28 900 m². What distance did the students run?

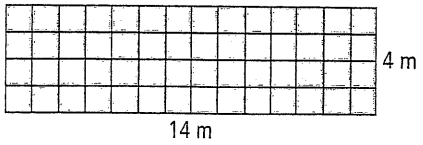
20. Adam's uncle has instructions for building a shed. One page of the instructions, shown below, is not very clear.



a) What is the area of the rectangle?

b) What is the side length of the square?

21. Kate is going to put a patio in her backyard. The patio stones she is using each have an area of 1 m². She has created the rectangular design shown.

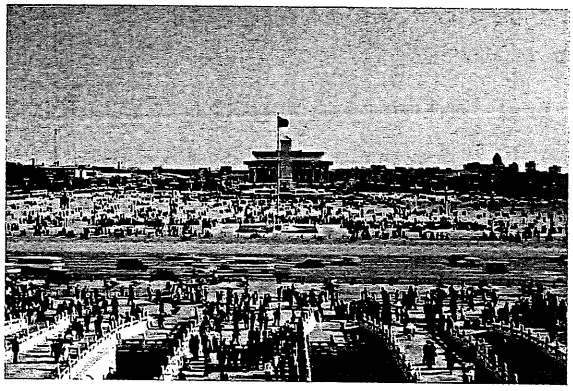


a) What is the area of the patio?

b) What are the dimensions of another rectangular patio she could build with the same area?

c) Kate decides to make a patio with the same area but she wants it to be a square with whole number side lengths. Is this possible? Explain your reasoning.

22. The world's largest city square is Tiananmen Square in Beijing, China. It has an area of 396 900 m².



a) What are the dimensions of the square?

b) If the square had dimensions of 629 m by 629 m, what would be the area?

23. A helicopter landing pad has a square shape. The area is 400 m². Use prime factorization to find the side length of the pad.