Squares and square roots: 10 practice questions

Year 7 · Free practice sheet from Tuterly · tuterly.com.au

Name: _____ Date: _____

Attempt all questions and show your working. Suggested time: 15 to 20 minutes.

Section A: Consolidating (Questions 1-4)

Question 1

Evaluate:

(a) 7^2

(b) 12^2

(c) 20^2

Question 2

Find:

(a) √(64)

(b) √(121)

(c) √(225)

Question 3

List all the perfect square numbers that are greater than 30 and less than 90.

Question 4

Copy and complete the table.

Number	4	9	(b)	36	(d)
Square root	2	(a)	4	(c)	10

Section B: Standard (Questions 5-10)

Question 5

Is 72 a perfect square? Explain your answer.

Question 6

Between which two consecutive whole numbers does each square root lie?

(a) $\sqrt{50}$

(b) $\sqrt{90}$

Question 7

Evaluate:

(a) $\sqrt{36} + \sqrt{49}$

(b) $\sqrt{36 + 64}$

(c) $\sqrt{9 \times 16}$

Question 8

Evaluate:

(a) $5^2 - 3^2$

(b) $\sqrt{5^2 - 3^2}$

Question 9

A square garden bed has an area of 81 m^2.

(a) What is the side length of the garden bed?

(b) What is its perimeter?

Question 10

A square floor tile has a side length of 30 cm. What is the area of the tile in square centimetres?

Squares and square roots: answers

Year 7 · Free practice sheet from Tuterly · tuterly.com.au

Question 1

Answer: (a) 49 (b) 144 (c) 400

Question 2

Answer: (a) 8 (b) 11 (c) 15

Question 3

Answer: 36, 49, 64, 81

Question 4

Answer: (a) 3 (b) 16 (c) 6 (d) 100

Question 5

Answer: No. $8^2 = 64$ and $9^2 = 81$, so 72 lies between two consecutive square numbers and no whole number squared gives 72.

Question 6

Answer: (a) 7 and 8 ($49 < 50 < 64$) (b) 9 and 10 ($81 < 90 < 100$)

Question 7

Answer: (a) 13 (b) 10 (c) 12

Question 8

Answer: (a) 16 (b) 4

Question 9

Answer: (a) 9 m (b) 36 m

Question 10

Answer: 900 cm^2 (30×30)