MATHEMATICS · YEAR 7

Mixed Problems: Squares and Square Roots

Practise squaring numbers and finding square roots.

Name _____ **Date** _____

Answer each question. Show your working where asked.

1 Calculate

1. 7^2 = _____

2. 13^2 = _____

3. 20^2 = _____

4. 4^2 = _____

5. $\sqrt{49}$ = _____

6. $\sqrt{121}$ = _____

7. $\sqrt{196}$ = _____

8. $\sqrt{400}$ = _____

2 Complete or compare

9. $\square^2 = 81$

The number in the box is _____

10. $\sqrt{\square} = 15$

The number in the box is _____

11. Write <, > or = to compare 9^2 and $\sqrt{6{,}400}$.

9^2 _____ $\sqrt{6{,}400}$

12. Is 15^2 more or less than 200?

It is _____ than 200.

3 Mixed problems

13. A square courtyard has an area of 196 m^2. What is the length of one side?

14. A square mosaic has 14 tiles along each side. How many tiles are there altogether?

15. A square picture frame has a perimeter of 36 cm. Find its side length and its area.

Check that you have answered every question and included units where needed.