

Name: _____

ASM Tuition Academy
POWER AND ROOTS

Instructions:

- Use **black** ink or ball-point pen.
- Answer all the questions.
- Answer the questions in the spaces provided
- there may be more space than you need.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all you're working out**.

Information:

- The marks for each question are shown in brackets
- use this as a guide as to how much time to spend on each question.

Advice:

- Read each question carefully before you start to answer it.
- Keep an eye on time.
- Try to answer every question.
- Check your answers if you have time at the end.

Q1. Work out 3^3

Answer: _____

(Total for Question 1 is 1 mark)

Q2. Work out the cube root of 125

Answer: _____

(Total for Question 2 is 1 mark)

Q3. Write down the value of $\sqrt[3]{8}$

Answer: _____

(Total for Question 3 is 1 mark)

Q4. Write down the value of 4^2

Answer: _____

(Total for Question 4 is 1 mark)

Q5. Write down a square number that is also an even number

Answer: _____

(Total for Question 5 is 1 mark)

Q6. Write down the value of 6^2

Answer: _____

(Total for Question 6 is 1 mark)

Q7. Work out 10^5

Answer: _____

(Total for Question 7 is 1 mark)

Q8. Write down the value of $\sqrt[3]{216}$

Answer: _____

(Total for Question 8 is 1 mark)

Q9. Work out 2^5

Answer: _____

(Total for Question 9 is 1 mark)

Q10. Work out the cube root of 1

Answer: _____

(Total for Question 10 is 1 mark)

Q11. Write down the value of $\sqrt{100}$

Answer: _____

(Total for Question 11 is 1 mark)

Q12. Write down the value of 5^3

Answer: _____

(Total for Question 12 is 1 mark)

Q13. Write down a square number that is also an odd number

Answer: _____

(Total for Question 13 is 1 mark)

Q14. Work out 4^3

Answer: _____

(Total for Question 14 is 1 mark)

Q15. Write down the value of 9^2

Answer: _____

(Total for Question 15 is 1 mark)

Q16. Work out the value of 7×10^2

Answer: _____

(Total for Question 16 is 1 mark)

Q17. From this list:

4, 6, 8, 10, 12, 16, 32

Write down all numbers that are powers of 2

Answer: _____

(Total for Question 17 is 1 mark)

Q18. Write $3 \times 3 \times 3 \times 3$ as a power of 3

Answer: _____

(Total for Question 18 is 1 mark)

Q19. From this list:

4, 7, 9, 16, 20, 25, 36, 50

Write down all square numbers

Answer: _____

(Total for Question 19 is 1 mark)

Q20. From this list:

8, 12, 16, 27, 30, 64, 100

Write down all cube numbers

Answer: _____

(Total for Question 20 is 1 mark)