

Maths

1. Which of the following numbers is a surd?

- A. $\sqrt{16}$
- B. $\sqrt{20}$
- C. $\sqrt{9}$
- D. $\sqrt{25}$

2. Simplify: $\sqrt{50}$

- A. $2\sqrt{5}$
- B. $5\sqrt{2}$
- C. $10\sqrt{5}$
- D. $\sqrt{25}$

3. The product of $\sqrt{3}$ and $\sqrt{12}$ is:

- A. $\sqrt{15}$
- B. $3\sqrt{4}$
- C. 6
- D. $6\sqrt{2}$

4. Which of the following pairs are like surds?

- A. $\sqrt{3}$ and $\sqrt{5}$
- B. $2\sqrt{7}$ and $5\sqrt{7}$
- C. $3\sqrt{2}$ and $3\sqrt{3}$
- D. $\sqrt{2}$ and $\sqrt{8}$

5. Simplify: $\sqrt{18} + 2\sqrt{8}$

- A. $3\sqrt{2} + 4\sqrt{2}$
- B. $5\sqrt{2}$
- C. $7\sqrt{2}$
- D. $2\sqrt{3}$

6. If $a = 2 + \sqrt{5}$, the conjugate of a is:

- A. $2 + \sqrt{5}$
- B. $2 - \sqrt{5}$
- C. $-2 + \sqrt{5}$
- D. $2\sqrt{5}$

7. Simplify: $\sqrt{(27/3)}$

- A. $\sqrt{9}$
- B. $3\sqrt{3}$
- C. 3
- D. $\sqrt{3}$

8. Multiply: $(2\sqrt{5})(3\sqrt{2})$

- A. $5\sqrt{10}$
- B. $6\sqrt{10}$
- C. $6\sqrt{5}$
- D. $10\sqrt{2}$

9. Rationalize: $4 / \sqrt{2}$

- A. $2\sqrt{2}$
- B. $4\sqrt{2}$
- C. $\sqrt{2} / 4$
- D. $2 / \sqrt{2}$

10. Rationalize: $1 / (\sqrt{3} + \sqrt{2})$

- A. $(\sqrt{3} - \sqrt{2})$
- B. $(\sqrt{3} - \sqrt{2}) / (3 - 2)$
- C. $1 / (\sqrt{3} - \sqrt{2})$
- D. $\sqrt{3} + \sqrt{2}$

Answers

- 1. *B.
- 2. *B.
- 3. *D.
- 4. *B.
- 5. *C.
- 6. *B.
- 7. *A.
- 8. *B.
- 9. *A.
- 10. *B.