

Edexcel Higher Paper 1

Surds

Simplify the Expressions:

1. $\sqrt{108}$

2. $\sqrt{18}$

3. $\sqrt{128}$

4. $\sqrt{225}$

5. $\sqrt{72}$

6. $\sqrt{32}$

7. $2\sqrt{3} + \sqrt{27}$

8. $4\sqrt{2} - \sqrt{8}$

9. $3\sqrt{5} + \sqrt{20} - \sqrt{125}$

10. $(\sqrt{18})^3$

11. $(2\sqrt{2})^3$

12. $(\sqrt{12} + 2)^2$

13. $(2 + \sqrt{12})(2 - \sqrt{12})$

Answers:

1. $6\sqrt{3}$

2. $3\sqrt{2}$

3. $8\sqrt{2}$

4. 15

5. $6\sqrt{2}$

6. $4\sqrt{2}$

7. $5\sqrt{3}$

8. $2\sqrt{2}$

9. 0

10. $54\sqrt{2}$

11. $16\sqrt{2}$

12. $16 + 8\sqrt{3}$

13. -8