

A2: Unit 3 Quiz 2 Review

Do ALL work on a separate sheet of notebook paper.

Simplify the expression.

1. $\sqrt{28}$	2. $\sqrt{-98}$	3. $-\sqrt{27}$	
4. $\frac{8}{\sqrt{3}}$	5. $\sqrt{\frac{20}{5}}$	6. $\frac{2}{1-\sqrt{3}}$	7. $\frac{\sqrt{7}}{2+\sqrt{6}}$

Simplify the expression. Express your answer in standard form.

8. $(6-3i)+(5+4i)$	9. $(-2-6i)-(4-6i)$	10. $(-2+5i)(-1+4i)$
11. $\frac{-2-5i}{3i}$	12. $\frac{-2-5i}{3+i}$	13. i^{4321}

Solve by factoring.

14. $x^2 = 49$	15. $14x^2 - 21x = 0$	16. $3x^2 = 60 - 3x$
----------------	-----------------------	----------------------

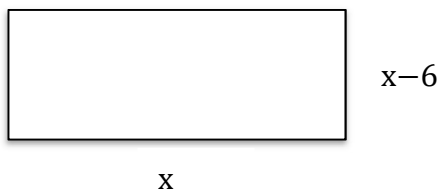
Solve by square root method.

17. $x^2 = -50$	18. $7x^2 - 10 = 25$	19. $(x+2)^2 - 5 = -8$
-----------------	----------------------	------------------------

Find the zeros using the indicated method

20. $y = 12x^2 + 5x - 7$, factoring	21. $4(x-1)^2 + 2 = 50$, square roots
--------------------------------------	--

22. The area of the rectangle below is 55. Solve for x algebraically by factoring.



23. State the quadratic formula.

ANSWERS

1. $2\sqrt{7}$

2. $7i\sqrt{2}$

3. $-3\sqrt{3}$

4. $\frac{8\sqrt{3}}{3}$

5. 2

6. $-\sqrt{3}-1$

7. $\frac{2\sqrt{7}-\sqrt{42}}{-2} = -\sqrt{7} + \frac{\sqrt{42}}{2}$

8. $11+i$

9. -6

10. $-18-13i$

11. $-\frac{5}{3} + \frac{2}{3}i$

12. $-\frac{11}{10} - \frac{13}{10}i$

13. i

14. ± 7

15. $0, \frac{3}{2}$

16. $-5, 4$

17. $\pm 5i\sqrt{2}$

18. $\pm\sqrt{5}$

19. $-2 \pm i\sqrt{3}$

20. $-1, \frac{7}{12}$

21. $1 \pm 2\sqrt{3}$

22. 11 units

23. refer to class notes