

East Los Angeles College
Department of Mathematics
Math 125
Test 2

Add or Subtract the following irrationals.

1. $3\sqrt{16} - 2\sqrt{12}$

2. $6\sqrt{4} + 5\sqrt{24}$

Multiply or Divide the following:

3. $\sqrt{5}(2 + \sqrt{5})$

4. $(3 + \sqrt{6})(1 - \sqrt{2})$

5. $(\sqrt{7} + \sqrt{3})^2$

6. $\frac{2}{\sqrt{5}}$

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

8. $\frac{1 - \sqrt{x}}{2 + \sqrt{x}}$

Add or Sub the following complex numbers:

9. $(3 + 51i) + (2 - 6i)$

10. $(-4 + i) - (2 + 4i)$

Multiply or Divide the following:

11. $-2i(3 + 2i)$

12. $(3 - 5i)(3 + 2i)$

13. $(5 + 2i)^2$

14. $(5 + 4i)(5 - 4i)$

15. $\frac{3i}{4 + 3i}$

16. $\frac{4 + i}{5 - 2i}$

Solve for x by using the **Square Root Formula**.

17. $x^2 + 4 = 40$

18. $2x^2 - 5 = 19$

19. $(x + 7)^2 = 36$

20. $(x - 8)^2 = -4$

Solve the following equations for x by using the **Quadratic Formula**

21. $x^2 - 3x - 4 = 0$

22. $2x^2 - 4x + 3 = 0$

Answer Sheet

1		12	
2		13	
3		14	
4		15	
5		16	
6		17	
7		18	
8		19	
9		20	
10		21	
11		22	