

East Los Angeles College
Department of Mathematics
Math 125
Test 2

Show work for Credit

Solve and Graph the following.

1. $4|x| - 8 < 19$

2. $6|x + 8| + 3 > 15$

3. $-2|x| + 9 < 15$

4. $-8|x + 1| + 4 \geq 20$

Write your answers in **interval notation**.

5. Problem 1

6. Problem 2

7. Problem 3

8. Problem 4

Write your answers in **set notation**.

9. Problem 1

10. Problem 2

11. Problem 3

12. Problem 4

Evaluate the following radicals.

13. $\sqrt{49x^8}$

14. $\sqrt{81x^4y^{12}}$

15. $\sqrt[3]{-27x^{15}}$

16. $\sqrt[3]{\frac{64}{x^6y^9}}$

Simplify the following radicals.

17. $\sqrt{32}$

18. $\sqrt{45}$

19. $\sqrt{12x^2y^5}$

20. $\sqrt{6x^4y^3}$

Add or Subtract the following irrationals.

21. $3\sqrt{20} - 2\sqrt{5}$

22. $6\sqrt{27} + 2\sqrt{25}$

Multiply or Divide the following:

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

24. $(4 + \sqrt{6})(2 - \sqrt{3})$

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

26. $\frac{2}{\sqrt{3}}$

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

28. $\frac{4 - \sqrt{x}}{3 + \sqrt{x}}$

Answer Sheet

1		15	
2		16	
3		17	
4		18	
5		19	
6		20	
7		21	
8		22	
9		23	
10		24	
11		25	
12		26	
13		27	
14		28	