

**SAMPLE TEST "C" -- INTERMEDIATE ALGEBRA**

1.  $(2x^3z)^2 = \underline{\hspace{2cm}}$
2.  $4^{-\frac{1}{2}} = \underline{\hspace{2cm}}$
3.  $\sqrt{75} - \sqrt{48} = \underline{\hspace{2cm}}$
4. Find the values of  $x$  which satisfy  $3 - 2x > 9$ .
5. Solve for  $x$ :  $4x - 2 = 6x + 8$
6. Solve for  $A$ :  $P = A + 3AT$
7. Solve for  $x$ :  $2x^2 + 5x - 3 = 0$
8. Solve the following system of equations: 
$$\begin{array}{r} 2x + y = -5 \\ x - 3y = -2 \end{array}$$
9.  $(x - 3)^2 = \underline{\hspace{2cm}}$
10. Simplify: 
$$\frac{7x^2 - 14x}{y^2} \div \frac{7x}{xy - 2y}$$
11. What is the distance between the points  $(2, 3)$  and  $(-14, 1)$ ?
12. What is the  $y$ -intercept of  $2x - 3y = 5$  ?
13. Factor:  $6x^2 + x - 2$
14. Graph:  $y = x^2 - 4x + 4$
15. Simplify: 
$$\frac{x^2 - 3x + 2}{2x - 2}$$