## **DUE BY 3/16/18**

**TURN IN BY 3/13/18 FOR EXTRA CREDIT!!**

## Show all work for full credit

1) Multiply $(3 x+2)(4 x-10)$. Identify the degree, leading coefficient, and type of polynomial.
2) The tickets for a dance recital cost $\$ 5.00$ for adults and $\$ 2.00$ for children. If the total number of tickets sold was 295 and the total amount collected was $\$ 1,220$, how many adult and children tickets were sold?
3) What is the solution to the inequality $-6 x-17 \geq 8 x+25$ ?
a. $x \geq 3$
b. $x \leq 3$
c. $x \geq-3$
d. $x \leq-3$
4) What is the result when $2 x^{2}+3 x y-6$ is subtracted from $x^{2}-7 x y+2$ ?
5) What is the product of $-3 x^{2} y$ and $\left(5 x y^{2}+x y\right)$ ?
a. $-15 x^{3} y^{3}-3 x^{3} y^{2}$
b. $-15 x^{3} y^{3}-3 x^{3} y$
c. $-15 x^{2} y^{2}-3 x^{2} y$
d. $-15 x^{3} y^{3}-x y$
