

Name _____

PROBLEM SET # 1
ECON 320

The Iowa State Education Association (ISEA) has called for an increase in Iowa teacher pay to the national average. According to National Education Association data, Iowa's pay averages \$40,877 (See <http://www.nea.org/student-program/about/state.html#iowa>) about 10% below the national median teacher's salary of \$44,672. ISEA suggests that to raise teacher salaries by \$5400 for about 35,000 teachers, we should transfer state money of \$187 million to local school districts. There may be other methods to raise pay.

1. In Figure 1 below, draw and label demand and supply curves representing the current market for elementary and secondary teachers in Iowa. Represent the equilibrium wage and number of teachers by W_0 and N_0 respectively.

How would an infusion of new state money affect the equilibrium wage and number of teachers in Iowa? Show the new demand and/or supply curves and label the new equilibrium wage and employment as W_1 and N_1 . Explain your answer.

2. In Figure 2 redraw the initial demand and supply conditions with equilibrium wage and employment at W_0 and N_0 respectively. Suppose instead that the state government decided to raise teacher standards without allocating additional revenue to local districts. Teachers would be required to pass periodic subject tests, with those failing required to take additional schooling or face forfeiture of teacher license. Show what would happen to equilibrium wage and number of teachers.

3. In Figure 3, redraw the initial conditions with initial equilibrium at W_0 and N_0 . Current projections are that baby boom generation teachers will begin retiring 5 years from now. At the same time, the number of school age children is projected to decline. Absent any new government intervention, how would these factors affect the demand for and supply of Iowa teachers and equilibrium wages and employment?

Extra Credit: Would offering \$31.51 per hour (or about \$47 thousand for a nine month school year) be enough to attract an average primary school teacher from Washington DC to Iowa? Use the Public Data Query feature of the National Compensation Survey to assist you in the answer. <http://data.bls.gov/labjava/outside.jsp?survey=nc>

Figure 1

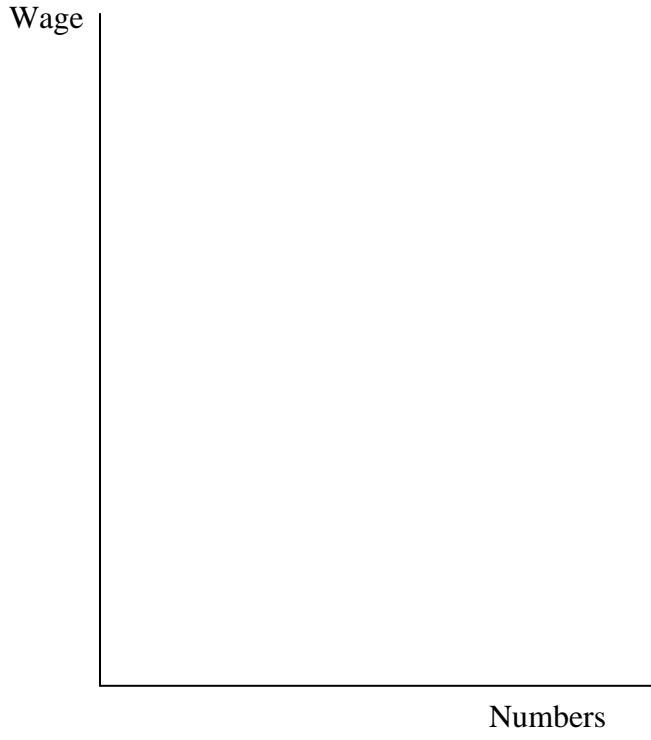


Figure 3

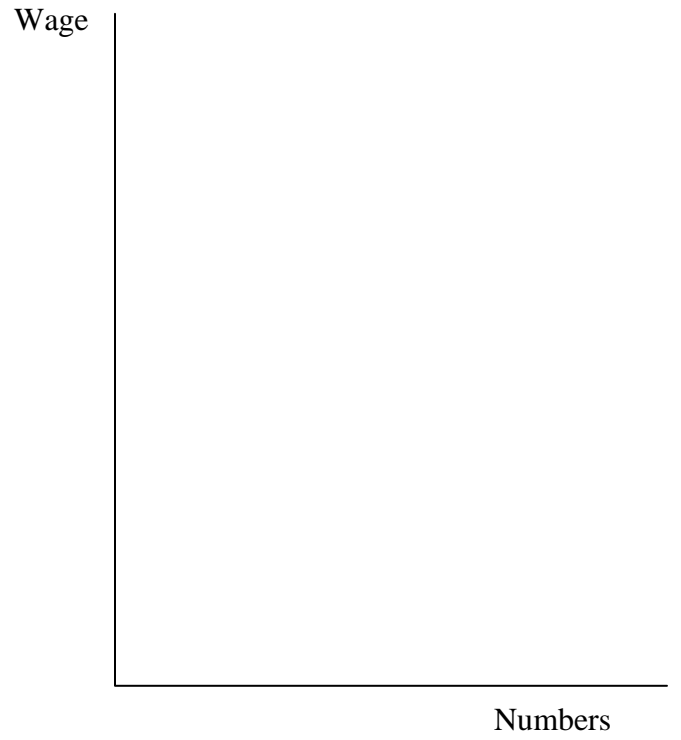


Figure 2

