This form is to be used to turn in the homework from Section 1.4. Follow these instructions to turn in the assignment:

✓ Write your name and the date that the assignment is due at the top of this page.
✓ Write the answers to each question on this form in the appropriate spaces.
✓ Turn in the form before 4:00pm on the day that it is due. It can be turned in during class, turned in during office hours, or placed in the instructor's mailbox on the second floor of Fenton Hall.

* Failure to follow these instructions will result in reduced credit.

(A.)

(i) \( P(x) = \frac{1}{x+1} \)

(ii) \( A = 3 \quad B = 2 \quad h = -2 \quad k = 0 \)

(iii) 

1. V. Str. by 3
2. H. Str. by 1
3. H. Shi. by -2

(iv)

Problem Number: 1.4.1 (4pt)

(E.)

(i) \( P(x) = x^2 \)

(ii) \( A = \frac{1}{4} \quad B = 1 \quad h = -3 \quad k = -1 \)

(iii) 

1. V. Str. by \( \frac{1}{4} \)
2. V. Shi. by -1
3. H. Shi. by 3

Problem Number: 1.4.2 (1pt)

Problem Number: 1.4.5 (1pt)

\( q(x) = P(2(x-2)) - 2 \)
Problem Number: 1.4.8 (1pt)

(B.) \((18,120)\)

(E.) \((30,96)\)

Problem Number: 1.4.9 (2pt)

(A.) Domain: \([-7,3]\) Range: \([-4,9]\)

(B.) Domain: \([-6,2]\) Range: \([-4,22]\)

(C.) Domain: \([-7,3]\) Range: \([-4,22]\)

Problem Number: 1.4.11 (1pt)

(A.) \(Q(t) = P(t) \div 500\)

(B.) \(R(t) = 1.4 \times P(t)\)

(C.) \(Q(t+1) = P(t+15)\)

(D.) The new plan produces a decrease as fast as the original plan.

Instructor Comments:

- Make sure to check the errata.
- In case it is unclear, part (iv) on the top right of the first page belongs to problem 1.4.1 (E.).
- Be as accurate as possible within reason while sketching your graphs.