Guess My Coefficients App

The Guess My Coefficients App familiarizes students with various forms of linear, quadratic, and absolute value functions.

1. Press APPS and select GuesCoef. Press any key to get to the SELECT A GAME menu. Select a game.

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APPLICATIONS
1:Link…
2:CBL/CBR
3:DataMate
4 GuesCoef
```

```
       SELECT A GAME
1 LINEAR
2: QUADRATIC
3: ABSOLUTE VALUE
4: LINEAR & QUADRATIC
5: ALL

QUIT OPTIONS INFO HELP
```

2. Select a function type.

```
   SELECT A QUADRATIC
1: y = a*x²+k
2 y = a(x-h)²+k
3: y = a(x-r)(x-s)
4: ALL FORMS

BACK            HELP
```
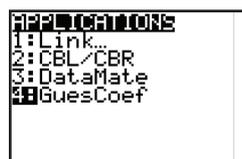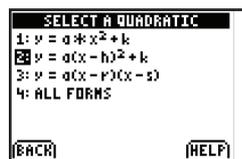
3. The graph of a function is shown. Press any key to study the graph. Press any key again to display the input dialog box. Use the arrow keys to select a coefficient, and then input the value. Repeat for any remaining values.

```
SCORE: 0    PROBLEM: 1




     PRESS ANY KEY
```

```



y=a(x-h)²+k
a =
h =
k =            HINT
```
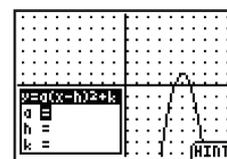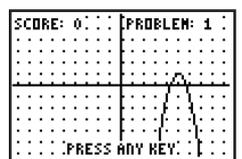
4. A graph of the function with the values you input is displayed along with the graph of the function in the problem. A message displays stating whether you are correct or incorrect. If incorrect, you can change your input and check your new answer.

```

      SORRY, YOU
      GUESSED WRONG!
      TRY AGAIN!

        GRAPH   OK
```

```

      VALUES ARE
      CORRECT!
      WELL DONE!

             OK
```
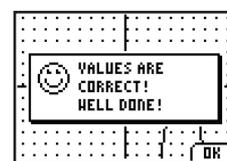
- If you are not sure about the values of a graph, you can obtain a hint, which marks some points on the graph and lets you trace the graph.

- Your score is computed based on whether you input the correct answer in the first or second try and whether you used a hint to help you determine the correct answer.

- The values that you input are always integers.

- For $y = a(x - r)(x - s)$ form, the coefficient a is either –1 or 1.

- For quadratic and absolute value functions, a is from the set +/- {1, 2, 3, 4}.