Name: _____ Date: _____

1. Solve with a graph.
   $-5 - x = -2.5$

2. Solve with a table.
   $x^2 - 4x = 0$

3. The body mass index compares weight and height. An index in the range of 19 to 24 is recommended for good health.
   The formula for body mass index is $I = \frac{W(704.5)}{H^2}$ where the index, *I*, is given in terms of weight in pounds, *W*, and height in inches, *H*.
   Create a table of body mass indices for a height of 62 inches and a range of weights from 90 to 130 pounds in increments of 10 pounds. (Round values to the nearest tenth.)

4. The body mass index compares weight and height. An index in the range of 19 to 24 is recommended for good health.
   The formula for body mass index is $I = \frac{W(704.5)}{H^2}$ where the index, *I*, is given in terms of weight in pounds, *W*, and height in inches, *H*.
   Use the following table of body mass indices for a height of 74 inches to solve the equation.

Weight (lb)	Index
150	19.3
160	20.6
170	21.9
180	23.2
190	24.4

$$19.3 = \frac{W(704.5)}{74^2}$$

5. Solve with a graph.
   $1 - x = 1.5$

6. Solve with a table.
   $x^2 + 5x = 0$

7. Solve with a graph.
   $2 - x = 6.5$

8. Solve with a table.
   $x^2 + 5x = 0$

9. The body mass index compares weight and height. An index in the range of 19 to 24 is recommended for good health.
   The formula for body mass index is $I = \frac{W(704.5)}{H^2}$ where the index, *I*, is given in terms of weight in pounds, *W*, and height in inches, *H*.
   Create a table of body mass indices for a height of 68 inches and a range of weights from 120 to 160 pounds in increments of 10 pounds. (Round values to the nearest tenth.)

10. Solve with a graph.
    $3 - x = -2$

11. Solve with a graph.
    $1 + x = 6$

12. Solve with a table.
    $x^2 - 3x = 0$

13. Solve with a table.
    $x^2 - 3x = 0$

14. The body mass index compares weight and height. An index in the range of 19 to 24 is recommended for good health.
    The formula for body mass index is $I = \frac{W(704.5)}{H^2}$ where the index, *I*, is given in terms of weight in pounds, *W*, and height in inches, *H*.
    Create a table of body mass indices for a height of 76 inches and a range of weights from 160 to 200 pounds in increments of 10 pounds. (Round values to the nearest tenth.)

15. The body mass index compares weight and height. An index in the range of 19 to 24 is recommended for good health.

The formula for body mass index is $I = \frac{W(704.5)}{H^2}$ where the index, *I*, is given in terms of weight in pounds, *W*, and height in inches, *H*.
Use the following table of body mass indices for a height of 68 inches to solve the equation.

Weight (lb)	Index
120	18.3
130	19.8
140	21.3
150	22.9
160	24.4

$$18.3 = \frac{W(704.5)}{68^2}$$

16. The body mass index compares weight and height. An index in the range of 19 to 24 is recommended for good health.

The formula for body mass index is $I = \frac{W(704.5)}{H^2}$ where the index, *I*, is given in terms of weight in pounds, *W*, and height in inches, *H*.
Use the following table of body mass indices for a height of 66 inches to solve the equation.

Weight (lb)	Index
110	17.8
120	19.4
130	21.0
140	22.6
150	24.3

$$19.4 = \frac{W(704.5)}{66^2}$$

Answer Key

1. –2.5
2. 0, 4
3.

Weight (lb)	Index
90	16.5
100	18.3
110	20.2
120	22.0
130	23.8

4. 150
5. –0.5
6. –5, 0
7. –4.5
8. –5, 0
9.

Weight (lb)	Index
120	18.3
130	19.8
140	21.3
150	22.9
160	24.4

10. 5
11. 5
12. 0, 3
13. 0, 3
14.

Weight (lb)	Index
160	19.5
170	20.7
180	22.0
190	23.2
200	24.4

15. 120
16. 120