STATION ONE: Solve each equation.

1. 3(a + 1) – 5 = 3a – 2

2. -4(r + 2) = 4(2 – 4r)

3. 4(4 – 4k) = -10 – 16k

4. Two thirds of a number reduce by 11 is equal to 4 more than the number. Find the number.

5. -5x – 10 = 2 – (x + 4)

STATION TWO: Linear functions

1. Find the slope between (3,4) and (3, -10)

2. What is the y-intercept of 2x – 4y = 12?

3. Find the slope of a line parallel to 5y + 5x = 10

4. Convert y – 4 = ½ (x + 2) into standard form.

5. Graph: x = 3

STATION THREE: Linear Functions Part II

1. Find the slope between the points (4,10) and (-2,8).

2. Find the slope between the points (8,4) and (8,-3).

3. At 6:00 in the morning, the temperature was 45 degrees. The temperature rose to 62 degrees by noon. What was the average rate of change in the temperature?

4. Write the equation of the line going through the point (-2,7) and has a slope of -2 in point-slope form.

5. Convert into standard form: y = 2/3x + 8

STATION FOUR: Proportions & Conversions

1. Convert 4.5 feet into inches.

2. Convert 30mph into feet per minute (1 mile = 5280ft)

3. Solve: $\frac{15}{y}=\frac{3}{2}$

4. Solve: $\frac{x-2}{9}=\frac{2}{3}$

5. Which is a better deal? Four tickets for $47.80 or 6 tickets for $66

STATION FIVE: All Mixed Up

1. The area of a triangle is A = 1/2bh. Solve this for b.

2. Draw a scatter plot with a negative correlation.

3. Translate: ten less than 3 times a number

4. Are the following lines parallel, perpendicular, or neither?

y = 2/3x + 7 and 2x + 3y = 7

5. An office worker can process 125 documents in 4 hours. What is the average rate he can process per hour?