Station 1

Wholly Percents!

**Translate each of the following into an equation and then solve the equation.**

1. **What number is 25% of 40?**
2. **What Number is 75% of 3000?**
3. **What percent of 28 is 7?**
4. **What percent of 20 is 14?**
5. **360 is 12% of what number?**
6. **240 is 12% of what number?**

Station 1

Literal Equations!

I literally love solving these equations!

1. **Solve P = a + b + c for a 2. PV = nRT for P**

**3.** $\frac{y+1 }{x}= \frac{-3}{5}$ **for y 4. 2x + 3y = 6 for y**

**5.** $\frac{y+2 }{x}= \frac{-1}{2}$ **for y 6.** $\frac{x}{7}- \frac{y}{3}= 1$ **for y**

**Station 3**

**Number Problems!**

 **#NoProblem**

**Write an equation for each problem, then solve.**

1. **The difference of ten and a number is negative 8. Find the number.**

1. **Five times the sum of a number and seven is thirty. Find the number.**
2. **Five times the difference of of twice a number and six is negative twenty. Find the number.**
3. **One number is two more than another. Their sum is eight. Find the numbers.**

1. **One number is three less than another. Their sum is 15. Find the numbers.**
2. **One number is five more than twice another. If their sum is decreased by ten, the result is twenty-two. Find the numbers.**

**Station 4**

**Age Problems!**

**Age Problems are no problem to me!**

**Make a table for each problem. Use the table to set up the equation, then solve.**

1. **Rebecca is 9 years older than Mohammad. In 7 years the sum of their ages will be 93. Find their ages now.**
2. **Mohammad is twice as old as Khalil. Three years ago the sum of their ages was 27. Find the age of Mohammad and Khalil.**

1. **Ned is 5 years older than Fatima. Six years from now, the sum of their ages will be 79. How old are they now?**
2. **Hanna is 4 years older than Ellie Eleanor. Five years ago the sum of their ages was 48. How old are they now?**
3. **Tori is 4 times as old as Marie. Five years ago, the sum of their ages was 50. How old are they now?**
4. **Juniper is 2 years older than Silas. In nine years the sum of their ages will be 30. Find their ages now.**

**Station 5**

**Solution or Not?**

1. **Is x = 4 a solution to the equation 3x – 5 = 7? Show your work and explain your reasoning.**
2. **Is x = -3 a solution to the equation 2x + 1 = 5? Show your work and explain your reasoning.**
3. **Is y = -2 a solution to the equation 3y – 4(y + 6) + 2 = 8? Show your work and explain your reasoning.**
4. **Is y = -6 a solution to the equation 7y – 5(y - 1) - 3 = 14? Show your work and explain your reasoning.**
5. **Is x = 0 a solution to the equation 6x + 7 = 7 – 6x? Show your work and explain your reasoning.**
6. **Is x = 1 a solution to the equation 2(5x – 1) + 6 = 4(4x + 3) - 6x? Show your work and explain your reasoning.**

**Station 6**

**Evaluating Formulas and Interpreting Solutions**

**The formula T = -0.0035A + 70 describes the relationship between temperature (T) and altitude (A) when the temperature on the ground is 70ºF. Use the formula T = -0.0035A + 70 to answer the following questions.**

1. **Evaluate the formula when A = 10,000. What does your answer mean?**
2. **Evaluate the formula when A = 30,000. What does your answer mean?**
3. **Find A if T = 56.**
4. **Find A if T is -42**
5. **Solve the formula for A.**
6. **Use your answer from problem 5 to find A if T = -7.**

**Answer Document**

**Station 1**

1. **Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Answer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
2. **Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Answer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
3. **Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Answer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
4. **Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Answer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
5. **Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Answer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
6. **Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Answer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Station 2**

**1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**3.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**5.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Station 3**

1. **Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Answer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
2. **Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Answer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
3. **Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Answer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
4. **Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Answer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
5. **Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Answer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
6. **Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Answer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Station 4**

1.

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Answer (in a complete sentence) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2.**

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Answer (in a complete sentence) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3.**

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Answer (in a complete sentence) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**4.**

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Answer (in a complete sentence) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5.**

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Answer (in a complete sentence) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**6.**

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Answer (in a complete sentence) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Station 5**

1. **\_\_\_\_\_\_\_\_\_ is/is not a solution because\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_ is/is not a solution because\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **\_\_\_\_\_\_\_\_\_ is/is not a solution because\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_ is/is not a solution because\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_ is/is not a solution because\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_ is/is not a solution because\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**Station 6**

1. **The answer \_\_\_\_\_\_\_\_\_ means\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
2. **The answer \_\_\_\_\_\_\_\_\_ means\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
3. **\_\_\_\_\_\_\_\_\_\_\_\_\_**
4. **\_\_\_\_\_\_\_\_\_\_\_\_\_**
5. **\_\_\_\_\_\_\_\_\_\_\_\_\_**
6. **\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Scoring Sheet for Stations 1-6. This should be handed in to Mrs. Talley**

**Station 1:**

**I got \_\_\_\_\_ problems correct out of 6, which means my percentage is \_\_\_\_\_. I am happy/unhappy with this score.**

**Station 2:**

**I got \_\_\_\_\_ problems correct out of 6, which means my percentage is \_\_\_\_\_. I am happy/unhappy with this score.**

**Station 3:**

**I got \_\_\_\_\_ problems correct out of 6, which means my percentage is \_\_\_\_\_. I am happy/unhappy with this score.**

**Station 4:**

**I got \_\_\_\_\_ problems correct out of 6, which means my percentage is \_\_\_\_\_. I am happy/unhappy with this score.**

**Station 5:**

**I got \_\_\_\_\_ problems correct out of 6, which means my percentage is \_\_\_\_\_. I am happy/unhappy with this score.**

**Station 6:**

**I got \_\_\_\_\_ problems correct out of 6, which means my percentage is \_\_\_\_\_. I am happy/unhappy with this score.**

**Steps I will take to improve or maintain my scores.**