Session 7: Shared Learning

|  |  |
| --- | --- |
| GRAPHS |  |
| **G1This is an image of graph 1 from the sample student assignment (y=-2x^2 + 4)** | **G2This is an image of graph 2 from the sample student assignment (y=4x^2 - 4)** |
| **G3This is an image of graph 3 from the sample student assignment (y=0.5x)** | **G4This is an image of graph 4 from the sample student assignment (y=(x+1)^2 - 1)** |
| **G5This is an image of graph 5 from the sample student assignment (y=4)**  | **G6This is an image of graph 6 from the sample student assignment (y=-2x-4)** |
| **Create a matching graph hereThis is an image of a blank graph for students to use during the sample student assignment.**  | **Create a matching graph hereThis is an image of a blank graph for students to use during the sample student assignment.**  |
| **Create a matching graph hereThis is an image of a blank graph for students to use during the sample student assignment.**  | **Create a matching graph hereThis is an image of a blank graph for students to use during the sample student assignment.**  |

|  |  |
| --- | --- |
| EQUATIONS |  |
| **E1** y = x2 +2x | **E2**y = $\frac{1}{2}$x |
| **E3**y = x2 -4 | **E4**y = -x + 4 |
| **E5**y = x - 4 | **E6**y = -2x |
| **Create a matching equation here** | **Create a matching equation here** |
| **Create a matching equation here** | **Create a matching equation here** |

|  |  |
| --- | --- |
| TABLES |  |
| **T1****This is an image of table 1 from the sample student assignment. The x values: -2, -1, 0, 1, 2. The y values: 0, -2, -4, -6, -8.**  | **T2****This is an image of table 2 from the sample student assignment. The x values: -2, -1, 0, 1, 2. The y values: 0, -3, -4, -3, 0**  |
| **T3****This is an image of table 1 from the sample student assignment. The x values: -2, -1, 0, 1, 2. The y values: 0, 3, 4, 3, 0.** | **T4****This is an image of table 1 from the sample student assignment. The x values: 1,2,3,4,5. The y values: 3, 2, 1, 0, -1.**  |
| **Create a matching table hereThis is a blank table for students to create during the sample student assignment.**  | **Create a matching table hereThis is a blank table for students to create during the sample student assignment.**  |
| **Create a matching table hereThis is a blank table for students to create during the sample student assignment.**  | **Create a matching table hereThis is a blank table for students to create during the sample student assignment.**  |
| **Create a matching table hereThis is a blank table for students to create during the sample student assignment.**  | **Create a matching table hereThis is a blank table for students to create during the sample student assignment.**  |

|  |  |
| --- | --- |
| REAL WORLD PROBLEMS |  |
| **R1**Andrew, Ben, and Jonathan are competing to see who can sell the most chocolate bars. Ben says he will sell 2 more bars than whatever Andrew sells. Jonathan says his sales will match whatever Andrew sells multiplied by what Ben sells. | **R2**Stephany is 4 years older than Erica. What equation would show Erica’s age (*y*) in terms of Stephany’s age (*x*)? |
| **R3**Marissa borrows $2 from her sister every month. What equation would show how much debt, *y*, Marissa will have after *x* months. | **R4**The Office of Parks and Recreation is building a square swimming pool. What equation could model the area of the pool, *y*, where each side, *x*, is of equal length? |
| **R5**Beauty Cuts, the local hair salon, has 3 employees - Frank has worked at the salon for 8 years; Shelly has worked at the salon for 1 year; Marcus has worked at the salon for 2 years. As a policy, Beauty Cuts gives all employees 4 sick days per year regardless of the number of years they have worked at the salon. What equation would show the number of sick days per employee, *y*, as a function of the number of years worked by the employee, *x*? | **R6**Roman is playing “Monkey in the Middle” with his two friends: His two friends must try to pass the ball back and forth over Roman’s head so that Roman cannot catch it. One of Roman’s friends stays 2 meters to Roman’s left; the other friend stands 2 meters to Roman’s right. Both friends start by picking the ball off the floor and then throwing it so that it reaches its highest point at 4 meters above Roman’s head before falling back down to the floor. |
| **Create a matching real world problem here** | **Create a matching real world problem here** |
| **Create a matching real world problem here** | **Create a matching real world problem here** |