**4UIQM: Element 2: Algebraic methods**

**Solutions to activities**

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| --- | --- |
| **Activity 1** | 1. 70x +25 2. x = variable, 25 = constant and 70 = coefficient |
| **Activity 2** | 1. and 2. and   and |
| **Activity 3** | 1. 6 |
| **Activity 4** |  |
| **Activity 5** | 1. u = -4 2. x = -5 3. t = |
| **Activity 6** | u= 13, v = -11 |
| **Activity 7** | 1. x = 3, y = 7 2. x = 5, y = 2 3. x = 6, y = 3 4. x = 4, y = -2 |
| **Activity 8** | x = 24, y = 12 |
| **Activity 9** | Adult’s meal $18  Child’s meal $10 |
| **Activity 10** | 1. and 3 2. t = 1 and 3. x = -2 and -4 4. y = -1 and |
| **Activity 11** | 7.74 feet |
| **Activity 12** | 1. x = 3.19 and -2.19 2. x = 1.15 and -0.65 3. x = 0.28 and -1.61 4. x = 2.41 and -0.41 |
| **Activity 13** | 1. Straight line |
| **Activity 14** | 1. Gradient = , y-intercept = 2. Gradient = -2 , y-intercept = 4 3. Gradient = , y-intercept = 3 4. Gradient = , y-intercept = -2 |
| **Activity 15** |  |
| **Activity 16** | 1. y = -3x + 9, y-intercept = 9 2. y = -2x + 4, y-intercept = 4 3. y = - x – 2, y-intercept = -2 4. y = , y-intercept = 2 |