**Formative assessment – complete and hand it in to me so that I can give you feedback:**

1. For the following equation, y = x2 – 6x + 10, fill in the table and show your work/explain how you know:

|  |  |  |  |
| --- | --- | --- | --- |
| Equation of Axis of symmetry | Coordinates of the vertex | y-intercept | Will it have a Minimum or a maximum |
|  |  |  |  |

1. For the following equation, y = -3 (x – 2)(x + 4), fill in the table below and show work/explain

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Zeros | Equation of Axis of symmetry | Coordinates of the vertex | y-intercept | Will it have a Minimum or a maximum |
|  |  |  |  |  |

1. What are the zeros of the following equation, y = (4x – 12) (9 + 3x)
2. Determine the equation of the parabola who passes through the following 3 points:

(10, 0), (20, -10), (30, 0)

1. A bus company usually transports 12 000 people per day at a ticket price of $1. The company wants to raise ticket prices. For every $0.10 increase in ticket price, the number of riders per day is expected to decrease by 400. CALCULATE THE TICKET PRICE THAT WILL MAXIMIZE THE REVENUE
   1. Create an equation to represent the quadratic function
   2. Find the zeros
   3. Find the vertex