IM2 – 3.1: (P – V1) Key Characteristics of Quadratics (Template 1)

F.IF.4

Name: _____ Per: _____ Date: _____

Directions – *For each set of binomial factors, distribute and write the expression in standard form. Graph both expressions in Desmos to check for accuracy. Identify all key characteristics below & sketch the graph:*

1. Binomial Factors: _____ Sketch (label all key coordinates & axes)

   Standard Form: _____

   Maximum / Minimum: _____

   Axis of Symmetry: x = _____

   Concave: Up / Down

   y-Intercept: _____

   x-Intercept(s): _____ & _____

2. Binomial Factors: _____ Sketch (label all key coordinates & axes)

   Standard Form: _____

   Maximum / Minimum: _____

   Axis of Symmetry: x = _____

   Concave: Up / Down

   y-Intercept: _____

   x-Intercept(s): _____ & _____

3. Binomial Factors: _____ Sketch (label all key coordinates & axes)

   Standard Form: _____

   Maximum / Minimum: _____

   Axis of Symmetry: x = _____

   Concave: Up / Down

   y-Intercept: _____

   x-Intercept(s): _____ & _____

4. Binomial Factors: _____ Sketch (label all key coordinates & axes)

Standard Form: _____

Maximum / Minimum: _____

Axis of Symmetry: x = _____

Concave: Up / Down

y-Intercept: _____

x-Intercept(s): _____ & _____

5. Binomial Factors: _____ Sketch (label all key coordinates & axes)

Standard Form: _____

Maximum / Minimum: _____

Axis of Symmetry: x = _____

Concave: Up / Down

y-Intercept: _____

x-Intercept(s): _____ & _____

6. Binomial Factors: _____ Sketch (label all key coordinates & axes)

Standard Form: _____

Maximum / Minimum: _____

Axis of Symmetry: x = _____

Concave: Up / Down

y-Intercept: _____