

FACTORED FORM	VERTEX FORM	STANDARD FORM
$y = a(x - s)(x - t)$	$y = a(x - h)^2 + k$	$y = ax^2 + bx + c$
<p>x-intercepts (zeros) are (s, 0) and (t, 0)</p> <p>- note the change in signs!</p>	<p>vertex is (h, k)</p> <p>- note the sign change of h</p> <p>- max or min value is k and it occurs at h</p> <p>- <math>x=h</math> is the equation of the axis of symmetry</p>	<p>y-intercept is (0, c)</p>
<p><b><math>y=(x + 2)(x - 4)</math></b> zeros are (-2, 0) and (4, 0)</p>	<p><b><math>y = (x - 1)^2 - 9</math></b> vertex is (1, -9) axis of symmetry is <math>x=1</math> minimum value is -9</p>	<p><b><math>y = x^2 - 2x - 8</math></b> y-intercept is (0, -8)</p>
<p>"a" tells us the direction of opening...</p> <p>If a is positive, the parabola opens up and has a minimum</p> <p>If a is negative, the parabola opens down and has a maximum</p>		

- how do you determine if a relation is linear or quadratic from: table of values (using differences); equation; and graph
- what are the key points on a parabola (you may want to draw a diagram and label it well!)
- how do you determine how wide/narrow a parabola is?
- how do you factor a simple trinomial?