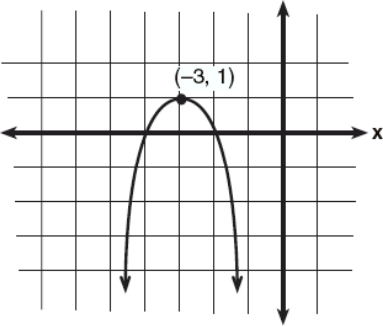
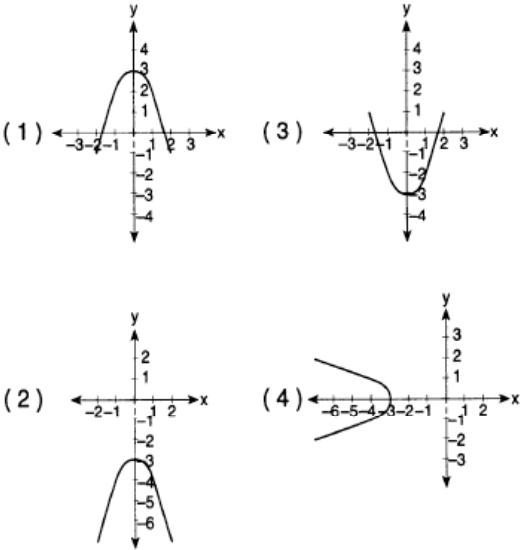


<p>1. What is the equation of a parabola that goes through points (0, 1), (-1, 6), and (2,3)?</p> <p>(1) $y = x^2 + 1$</p> <p>(2) $y = 2x^2 + 1$</p> <p>(3) $y = x^2 - 3x + 1$</p> <p>(4) $y = 2x^2 - 3x + 1$</p>	<p>2. Find the solution set of $x^2 - 3x - 28 \geq 0$.</p>
<p>3. Which equation represents the parabola shown in the accompanying graph?</p>  <p>(1) $f(x) = (x+1)^2 - 3$</p> <p>(2) $f(x) = -(x-3)^2 + 1$</p> <p>(3) $f(x) = -(x+3)^2 + 1$</p> <p>(4) $f(x) = -(x-3)^2 - 3$</p>	<p>4. Which graph represents the equation $y = x^2 - 3$?</p> 
<p>5. What is the y-intercept of the graph of the parabola whose equation is $y = x^2 - 2x - 8$?</p>	<p>6. Find the multiplicative inverse of the complex number $5 - 9i$ and express it in $a + bi$ form.</p>
<p>7. Combine and express in simplest form:</p> $\frac{y-20}{y^2-16} + \frac{2}{y-4}$	<p>8. If $f(x) = \frac{3}{x}$ and $g(x) = 3x^2 + 6x + 3$, then find all values of x satisfying the equation $(f \circ g)(x) = \frac{1}{9}$.</p>

9. State whether this relation is a function. Explain your answer.

$\left\{ \begin{array}{l} (\text{Jan}, 31), (\text{Feb}, 28), (\text{Feb}, 29), (\text{Mar}, 31), (\text{Apr}, 30), \\ (\text{May}, 31), (\text{Jun}, 30), (\text{Jul}, 31), (\text{Aug}, 31), (\text{Sep}, 30), \\ (\text{Oct}, 31), (\text{Nov}, 30), (\text{Dec}, 31) \end{array} \right\}$

10. For the equation $y = 2x - 10x^2 + 15$, state the sum of the roots and the product of the roots.

11. Solve the equation $x^2 - 6x - 2 = 0$ and express the roots in simplest $a + bi$ form.

12. For each function, express $\frac{f(x+h) - f(x)}{h}$ in simplest form where $h \neq 0$:

a) $f(x) = x^2$

b) $f(x) = \frac{1}{x}$

c) $f(x) = 5$

13. Solve: $\sqrt{x+4} + \sqrt{1-x} = 3$