

Quadratic Function in standard form: $f(x) = ax^2 + bx + c$

Quadratic Function in vertex form: $f(x) = a(x-h)^2 + k$

Quadratic Function in intercept form: $f(x) = a(x-p)(x-q)$

1. $y = x^2 + 2x - 3$
opens up or down?

up

2. $y = -3x^2 + 4x + 5$
opens up or down?

down

3. $y = 3 + 2x - 4x^2$
opens up or down?

down

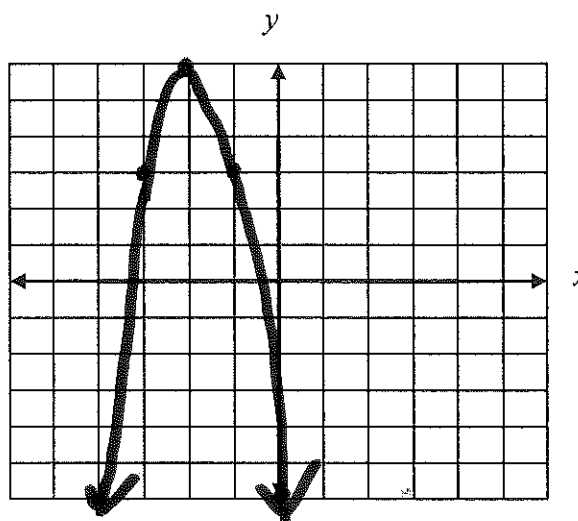
4. $y = -\frac{2}{3}x^2$
opens up or down?

down

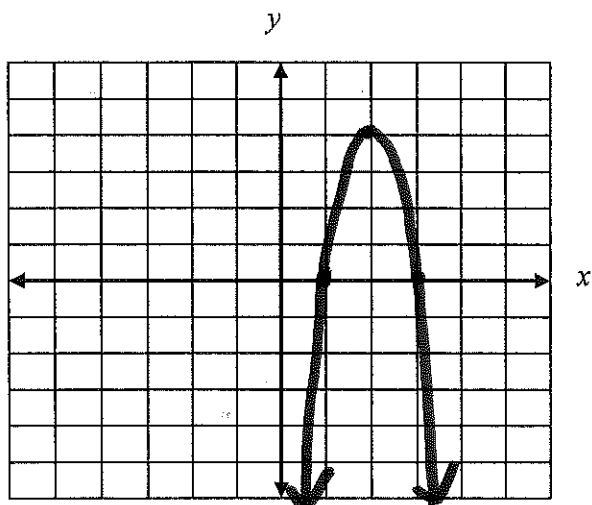
5. $y = -5x + \frac{1}{6}x^2 - 3$
opens up or down?

up

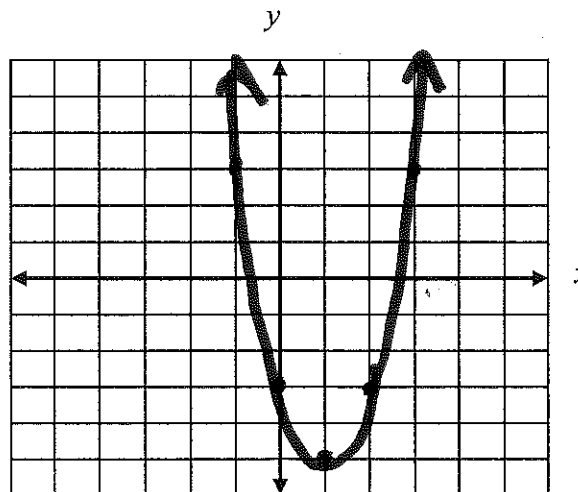
6. Graph $y = -3(x+2)^2 + 6$



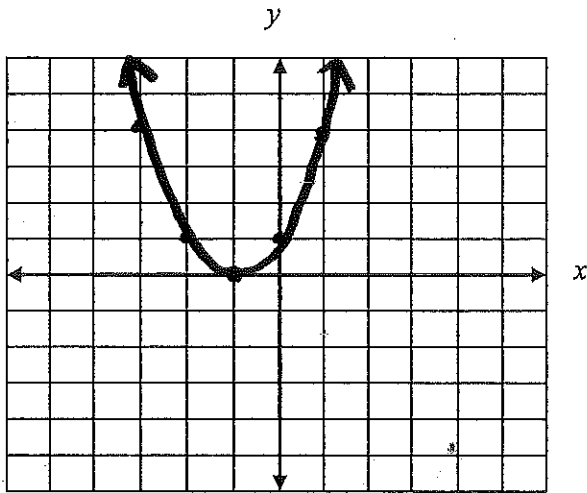
7. Graph $y = -4(x-2)^2 + 4$



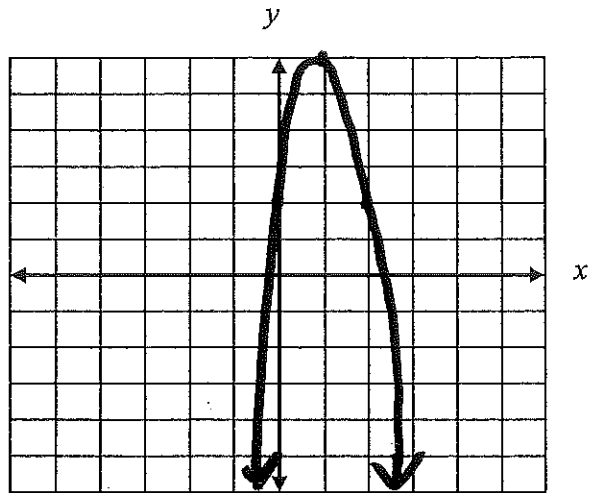
8. Graph $y = 2(x-1)^2 - 5$



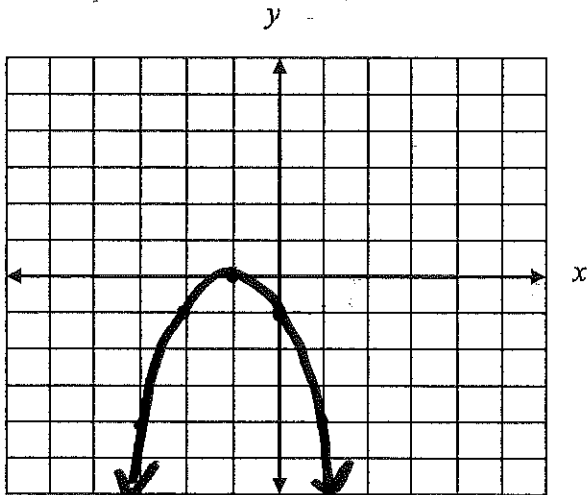
9. Graph $y = x^2 + 2x + 1$



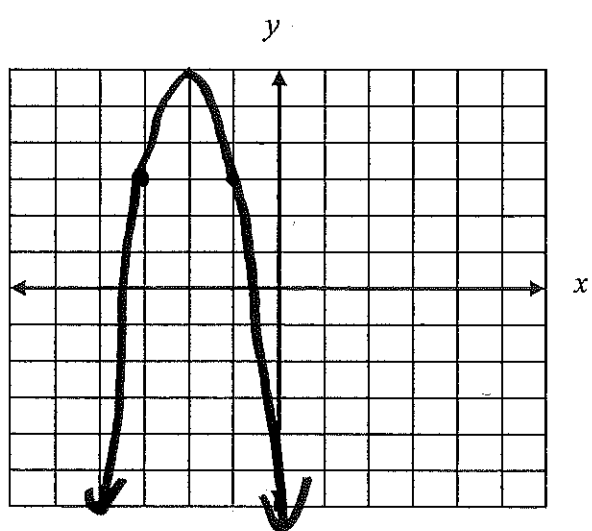
10. Graph $y = -4x^2 + 8x + 2$



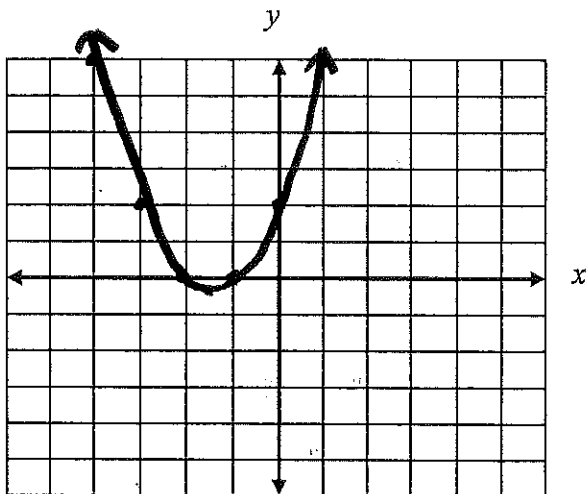
11. Graph $y = -x^2 - 2x - 1$



12. Graph $y = -3(x+2)^2 + 6$



13. Graph $y = (x+1)(x+2)$



14. Graph $y = (x-5)(x-1)$

