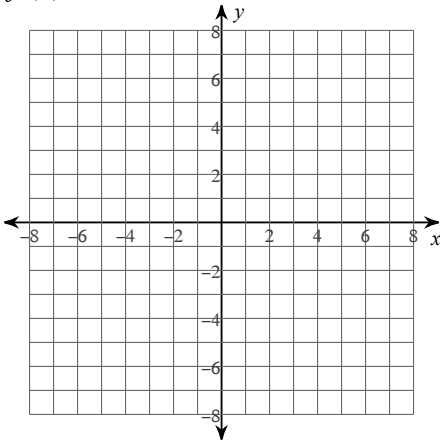


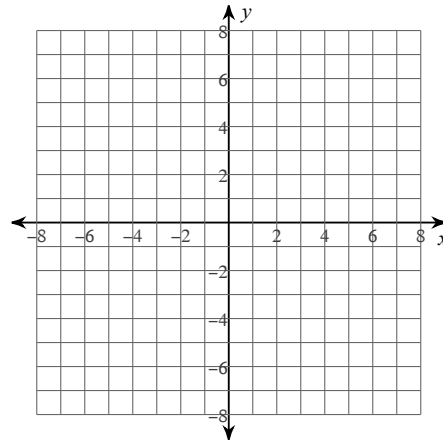
Graphing and Factoring

Sketch the graph of each function. Make a table and use 5 points for each graph.

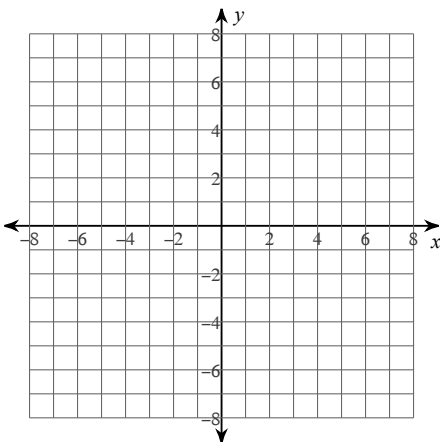
1) $f(x) = -3x^2 + 2$



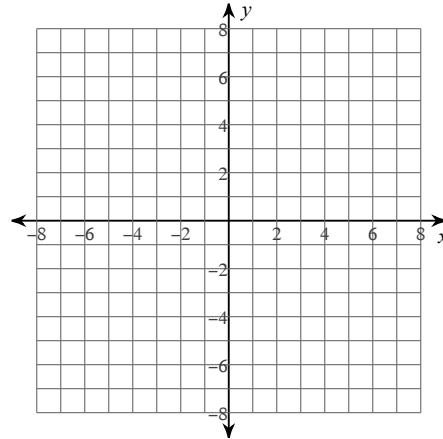
2) $f(x) = -\frac{1}{3}x^2 - 2$



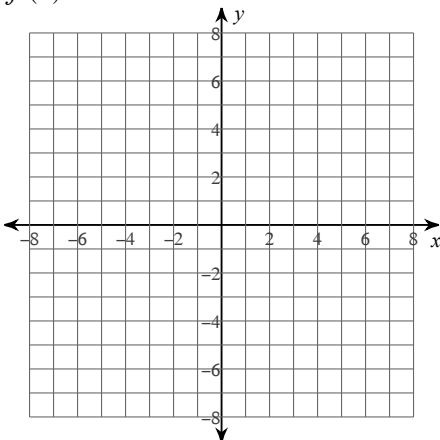
3) $f(x) = \frac{1}{4}x^2$



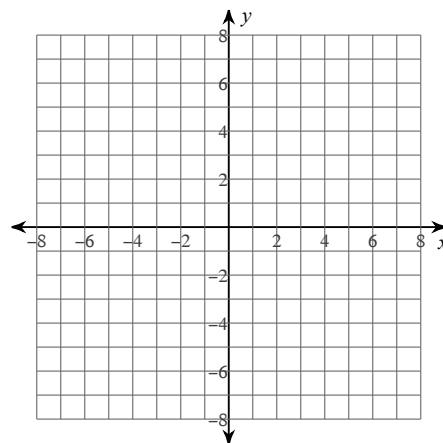
4) $f(x) = 4x^2 - 3$



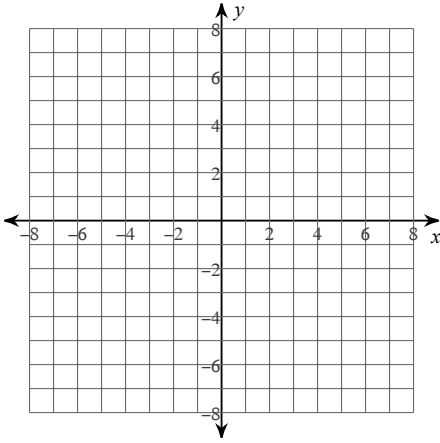
5) $f(x) = -2x^2 + 4$



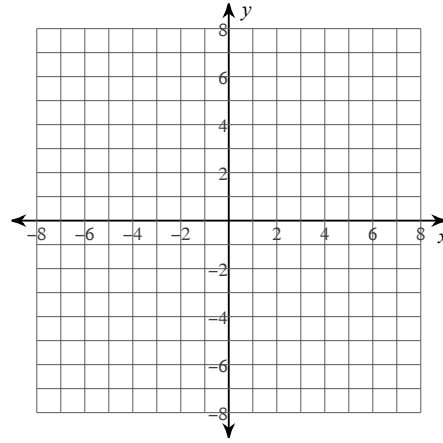
6) $f(x) = -\frac{1}{2}x^2 - 5$



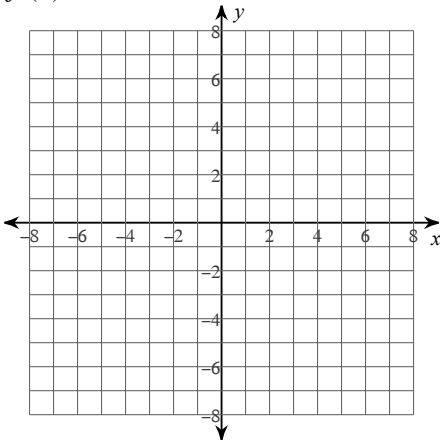
7) $f(x) = 0.25x^2 + 2$



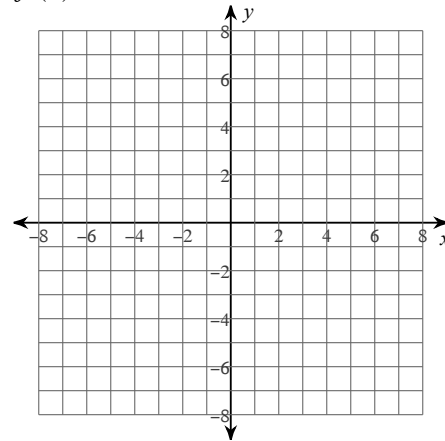
8) $f(x) = 2.25x^2 - 2$



9) $f(x) = 2x^2 + 5$



10) $f(x) = 5x^2 + 3$



Factor each completely. Remember to factor out GCF, if applicable.

11) $2b^2 - 14b - 16$

12) $n^2 - 9n$

13) $x^2 + 4x - 5$

14) $v^2 + 11v + 10$

15) $14a^2 + 6a$

16) $3v^2 + 10v - 25$

Solve each equation by factoring. (Factor, then set each equal to zero and solve.)

17) $n^2 - 6n = 0$

18) $k^2 - 2k = 0$

19) $x^2 - 3x = 0$

20) $m^2 + 8m + 16 = 0$

21) $m^2 + 6m + 8 = 0$

22) $x^2 - 8x = 0$

23) $p^2 + 5p - 14 = 0$

24) $x^2 + x - 6 = 0$