

Factoring and some graphing for fun.

Date _____ block _____

Factor each completely.

1) $4n^3 - 10n^2 + 10n - 25$

2) $5v^3 + 20v^2 + v + 4$

Factor each.

3) $y = 4x^6 - 12x^4 - 9x^2 + 27$

4) $y = 25x^6 - 75x^4 - 4x^2 + 12$

5) $y = 4x^7 + x^5 - 100x^3 - 25x$

6) $y = 9x^6 - 45x^4 - 16x^2 + 80$

Factor each completely.

7) $5x^4 + 26x^2 + 24$

8) $3x^4 + 37x^2 + 90$

9) $7x^4 + 36x^2 - 36$

10) $5u^4 + 26u^2 + 5$

11) $27 + 8x^3$

12) $128 - 2x^3$

13) $192x^3 + 81$

14) $500x^3 + 256$

15) $x^2 + 3x + 2$

16) $2m^2 - 4m - 160$

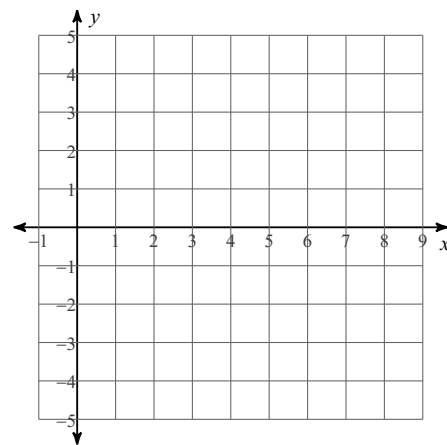
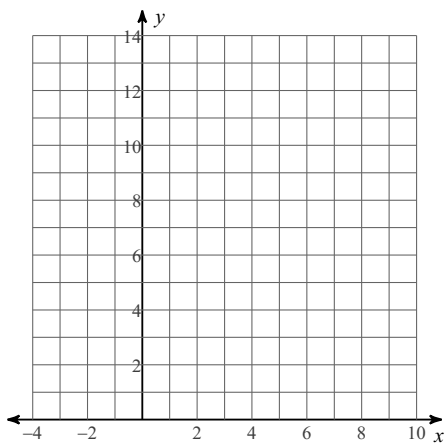
17) $4x^2 + 36x + 32$

18) $4a^2 + 4a - 288$

Sketch the graph of each function.

19) $y = 3(x + 1)^2 + 1$

20) $y = -2(x - 3)^2 + 4$



Graph each equation.

21) $y = -2|x - 3|$

22) $y = -3|x| - 1$

