

Accelerated Math III Thanksgiving 2016 Assignment DUE MON 11/28/16

Divide.

1) $(6m^4 + 10m^3 - 2m^2 - 7m - 6) \div (m + 1)$

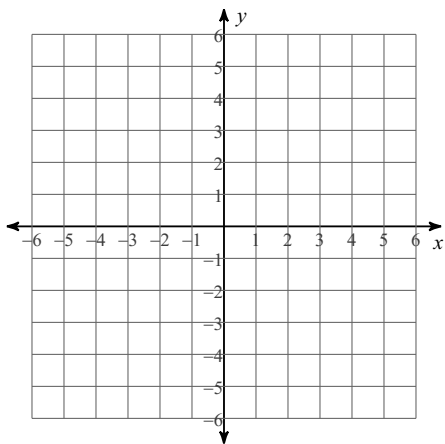
2) $(5x^4 + 4x^3 + 4) \div (5x + 4)$

3) $(9x^4 - 85x^3 - 60x^2 + 90x + 94) \div (x - 10)$

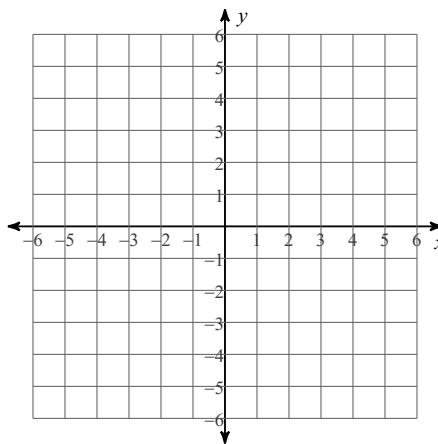
4) $(9v^4 - 3v^3 + 27v - 5) \div (9v - 3)$

Sketch the graph of each line.

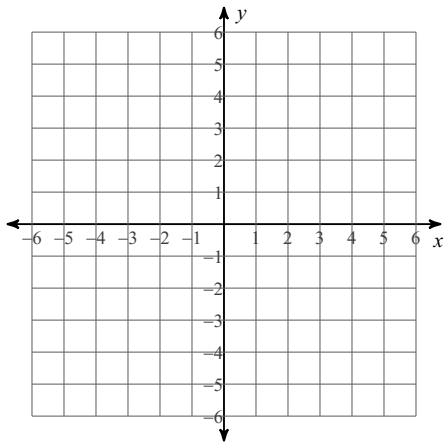
5) $y = \frac{7}{2}x + 4$



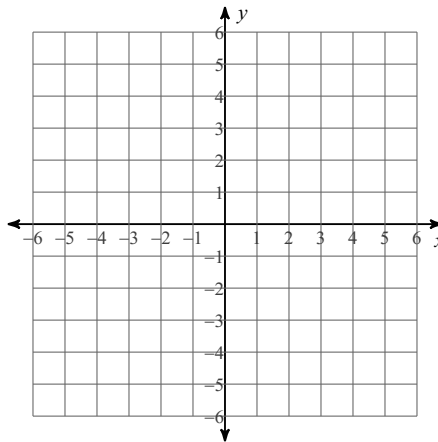
6) $y = -\frac{2}{3}x$



7) $9x + 4y = 16$



8) $x - 2y = 8$



Factor each polynomial and identify their number and type of zeros.

9) $y = x^2 + 5x + 6$

10) $y = x^2 - 4$

11) $y = x^2 + x - 12$

12) $y = x^2 + 8x + 16$

13) $y = x^4 - x^2 - 72$

14) $y = x^4 - 5x^2 - 36$

15) $y = x^4 - 8x^2 + 7$

16) $y = x^4 + 4x^2 - 5$

17) $y = x^3 + 27$

18) $y = x^3 + 1$

19) $y = x^3 - 125$

20) $y = x^3 + 8$

21) $y = x^3 + 5x^2 - x - 5$

22) $y = x^3 + 2x^2 - x - 2$

23) $y = x^3 + x^2 + 3x + 3$

24) $y = x^3 - 2x^2 - x + 2$