

Week 1 Material  
Pre-Test

Simplify each of the following (2 points each):

1. $\frac{64t^3u^5}{4t^{-5}u^9}$	2. $(3x^2y^{-2})^{-5}$
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Name each of the polynomials by degree and number of terms (2 points each):

3. $-8x^4 + 5x^3 - x^2 + 6x - 15$	4. $25x^3 + 1$
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Simplify each of the following by performing the specified operation (2 points each):

5. $(8x + 5x^4 + 7x^3) + (4 - 6x - 5x^4)$	6. $(5n^2 - 3n^3 - 7n^4) - (3n^2 - 6n^4 + 3n^3)$
7. $(3x + 2)(x^2 - 5)$	8. $(5x^3 - x^2 + 6) \div (x - 4)$

Rewrite each polynomial pulling out the GCF of each (2 points each):

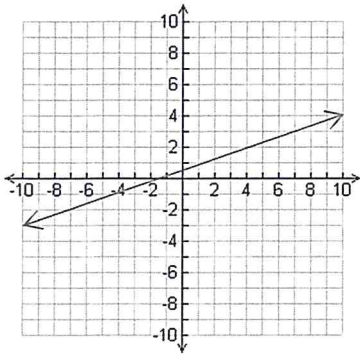
9. $x^2 - 5x$	10. $21x^3y^2 - 14x^2y - 28x^2y^2$
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Completely factor each of the following (2 points each):

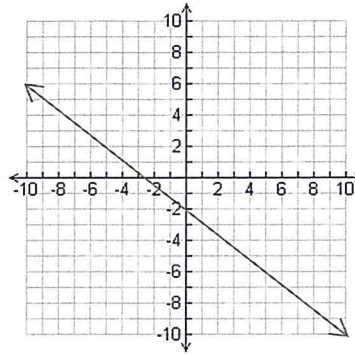
11. $9p^2 - 25$	12. $4n^2 + 56n + 180$
13. $9x^2 - 11x - 14$	14. $x^4 - 16x^2 + 60$
15. $729x^3 + 3375$	16. $1331x^3 - 2197$

Find the Slope of the line given the graph (1 point each):

17.



18.



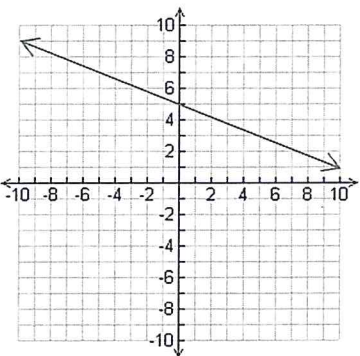
Find the slope of the line containing the given points (2 points each):

19.  $(18, -21)$  &  $(5, 9)$

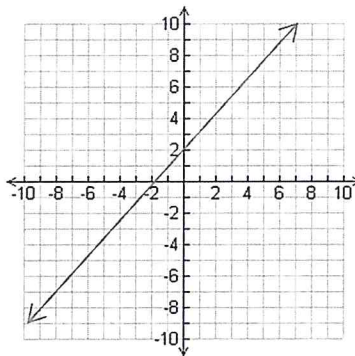
20.  $(-7, -2)$  &  $(10, -8)$

Write the Linear Equation in Slope-Intercept form given the graph (2 points):

21.



22.



Write the Linear Equation in Slope-Intercept form using the given information (2 points):

23. $m = 3$ & $(6, -7)$	24. $m = -5$ & $(10, -15)$
25. $m = -0.125$ & $(24, -10)$	26. $m = 0.9$ & $(81, 16)$

Write the Linear Equation in Slope-Intercept form using the given information (2 points):

27. $(9, 52)$ & $(-5, -32)$	28. $(13, -114)$ & $(-2, 21)$
29. $(-10, 103)$ & $(-4, 37)$	30. $(-6, -35)$ & $(4, 45)$