

Homework 9 Review		Unit 1	
1. $(-2y^4)(3y)$ $-6y^5$	2. $(-3c^3d)^2$ $9c^6d^2$	3. $\frac{a^3b^2c^5}{abc^4}$ a^2bc	4. $\frac{3xy^{-2}}{z^{-1}}$ $\frac{3xz}{y^2}$
5. $\left(\frac{x}{y}\right)^3$ $\frac{x^3}{y^3}$	6. $\frac{7x^2y^{-4}}{21x^2y^3}$ $\frac{1}{3y^7}$	7. $\left(\frac{2}{3}\right)^{-3}$ Use positive exponents only. $\frac{27}{8}$	8. $4^{-2}x^{-5}y^3$ Use positive exponents only. $\frac{y^3}{16x^5}$
9. $(a^4b^{-1})^{-2}$ Use positive exponents only. $\frac{b^2}{a^8}$	10. Rewrite $\sqrt{10w}$ $(10w)^{\frac{1}{2}}$	11. Rewrite $13^{\frac{2}{3}}$ $\sqrt[3]{169}$	12. Rewrite $\sqrt[5]{11^2}$ $11^{\frac{2}{5}}$
13. Rewrite and simplify $(-32)^{3/5}$ -8	14. $\sqrt{-9}$ $3i$	15. $\sqrt{-16c^2d^2}$ $4cdi$	16. i^3 $-i$
17. i^7 $-i$	18. i^{30} -1	19. $(3+2i)+(9+i)$ $12+3i$	20. $(2-i)-(5+i)$ $-3-2i$
21. $(11i^4 + 4i^3) - (2i^4 - 6i^3)$ $9-10i$	22. $(5+i^3) - (3-i^3)$ $2-2i$	23. $(-3-5i) + (4-2i)$ $1-7i$	24. $(3+i^2) + i^4$ 3
25. $i(1+i)$ $-1+i$	26. $i(2-i)$ $1+2i$	27. $2i(6+i)$ $-2+12i$	28. $(-2i)(5i)(-4i)$ $-40i$
29. $(2i)^3 + (4i)^2$ $-16-8i$	30. $-i(3+i)$ $1-3i$	31. $-2i(1+4i)$ $8-2i$	32. $(2+4i)(2-4i)$ 20
33. $(-2i)^2(3i)^3$ $-108i$	34. $(5-6i)(7-2i)$ $23-52i$	35. $(3+i)(2+i)$ $5+5i$	36. $(-7-i)(3+2i)$ $-19-17i$
37. $(3+\sqrt{-4})(4+\sqrt{-1})$ $10+11i$	38. $-5(1+2i) + 3i(3-4i)$ $7-i$	39. $\frac{6-3i}{2i}$ $\frac{-3-6i}{2}$ or $-\frac{3+6i}{2}$ or $-\frac{3}{2} - 3i$	40. $\frac{2}{3-i}$ $\frac{3+i}{5}$

$10+7-11$

$-\frac{3+6i}{2}$

$-\frac{3}{2} - 3i$