

SM2-A HW #3-3 (Review)

Date _____ Period _____

Simplify.

1) $(2 - 8i) - (-7 - 5i)$

2) $(-2i) + (4i) + (-4 - 7i)$

3) $(8 - 4i)(4 + i)$

4) $(5 + 8i)^2$

Simplify. Your answer should contain only positive exponents.

5) $u^{-1}v^{-1} \cdot u^3 \cdot 3u^4v^4$

6) $x^{-3}y^4 \cdot x^{-1}y^{-2}$

7) $(4a^2b^{-3})^2$

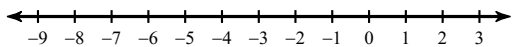
8) $(4yx^3)^4$

9) $\frac{4n^{-3}}{2m^{-2}n^3}$

10) $\frac{2a^{-4}}{4a^{-1}b^{-1}}$

Solve each inequality and graph its solution.

11) $|p + 3| \leq 2$



12) Factor:

$$x^2 + 10x + 25 = 0$$

Simplify.

13) $\sqrt{75x^3}$

14) $\sqrt[4]{32u^8v^5}$

15) $-\sqrt{6} - 3\sqrt{6} + 2\sqrt{5}$

16) $2\sqrt{45} - \sqrt{2} + 3\sqrt{5}$

17) $\sqrt{6}(\sqrt{2} + 2)$

18) $\sqrt{15}(\sqrt{3} + \sqrt{10})$

19) $\frac{\sqrt{5}}{4\sqrt{80}}$

20) $\frac{\sqrt{15}}{5\sqrt{27}}$

21) $\frac{4\sqrt{8}}{3\sqrt{36}}$

22) $\frac{\sqrt{2m}}{\sqrt{5m^4}}$

23) $\frac{5x}{4\sqrt{2x^4}}$

24) $\frac{2\sqrt{4k^3}}{\sqrt{5k}}$