SECTION 8-2

EXERCISE A

Simplify.

1) $\sqrt{225}$ 2) $\pm\sqrt{169}$ 3) $\sqrt{-(-7)^2}$ 4) $\sqrt{(-18)^2}$

5) $\sqrt[3]{-27}$ 6) $\sqrt[7]{128}$ 7) $\sqrt{\frac{1}{16}}$ 8) $\sqrt[3]{\frac{1}{125}}$

9) $\sqrt{0.25}$ 10) $\sqrt[3]{-0.064}$ 11) $\sqrt[4]{z^8}$ 12) $-\sqrt[6]{x^6}$

13) $\sqrt{49m^6}$ 14) $\sqrt{64a^8}$ 15) $\sqrt[3]{27r^3}$ 16) $\sqrt[3]{-c^6}$

17) $\sqrt{(5g)^4}$ 18) $\sqrt[3]{(2z)^6}$ 19) $\sqrt{25x^4y^6}$ 20) $\sqrt{36x^4z^4}$

21) $\sqrt{169x^8y^4}$ 22) $\sqrt{9p^{12}q^6}$ 23) $\sqrt[3]{8a^3b^3}$ 24) $\sqrt[3]{-27c^9d^{12}}$

Use a calculator to approximate each value to the nearest thousandths (three decimals).

25) $-\sqrt{147}$ 26) $\sqrt{4.27}$ 27) $\sqrt[3]{-480}$ 28) $\sqrt[5]{891}$

29) $\sqrt[7]{46815}$ 30) $\sqrt[4]{(3500)^2}$

EXERCISE B

31) Pete's Pet Emporium found that the number of customers that will attend a limited time sale can be modeled by the formula: $N = 125\sqrt[3]{100Pt}$ where ***N*** is the number of customers expected, ***P*** is the percent of the sale discount, and ***t*** is the number of hours the sale will last. Find the number of customers the store can expect for a sale that is 50% off and will last four hours.

ANSWERS:

1)	15	7)	1/4	13)	$7\lvert m^3\rvert$	19)	$5x^2\lvert y^3\rvert$	25)	-12.124
3)	not real	9)	0.5	15)	3r	21)	$13x^4y^2$	27)	-7.830
5)	-3	11)	z^2	17)	$25g^2$	23)	2ab	29)	4.647
								31)	731