

7.1 - 7.2 supplement

1)  $3|x|y^2 \sqrt{yz}$

2)  $4x \sqrt[3]{xy^2}$

3)  $3x^2|y||z|^3$

4)  $|x^3||y| \sqrt{19}$

5)  $\frac{a^2 b^{3y-5}}{5 a^{x+5}} \cdot \frac{27 a^{3x} b^{9y}}{b^{3y}}$

$= \frac{27 a^{3x+2} b^{12y-5}}{5 a^{x+5} b^{3y}} =$

$\frac{27 a^{2x-3} b^{9y-5}}{5}$

6)  $\frac{16 m^{6x} n^2}{m^{10x}} \cdot \frac{n^{3y+1} m^{x+4}}{16 n^{7y}} = \frac{m^{7x+9} n^{3y+3}}{m^{10x} n^{7y}} = m^{-3x+9} n^{-4y+3}$

7)  $2x^5 = 64$   
 $x^5 = 32$   
 $x = 2$

8)  $6(x-7)^6 = 6$   
 $(x-7)^6 = 1$   
 $x-7 = \pm 1$   
 $x = 7 \pm 1$   
 $x = 8, 6$

9)  $(x+5)^4 = 81$   
 $x+5 = \pm 3$   
 $x = -5 \pm 3$   
 $x = -8, -2$