

ALGEBRA II REVIEW PROBLEMS
(Chapter 7)

1. Simplify the following:

a. $\sqrt[4]{x^{18}y^8}$

b. $(\sqrt{3})(\sqrt{18})$

c. $\frac{\sqrt[3]{640w^3z^8}}{\sqrt[3]{5wz^4}}$

d. $\frac{\sqrt[3]{5}}{\sqrt[3]{6}}$

e. $\frac{2}{2\sqrt{2}-3}$

f. $8\sqrt{45} - 3\sqrt{80}$

g. $(32x^{20}y^{-10})^{-1/5}$

h. $(x^{1/3})(x^{1/6})$

2. Solve the following:

a. $\sqrt{x+20} - x = 0$

b. $\sqrt{4x-12} + 3 = x$

c. $\sqrt{x-2} - \sqrt{2x+3} = -2$

3. Graph the following:

a. $y = -\sqrt{x} - 1$

b. $y = \sqrt{x+4}$

ANSWERS

1a) $x^4 y^2 \sqrt{x}$

b) $3\sqrt{6}$

c) $4z \sqrt[3]{2w^2z}$

d) $\frac{\sqrt[3]{180}}{6}$

e) $-4\sqrt{2} - 6$

f) $12\sqrt{5}$

g) $\frac{y^2}{2x^4}$

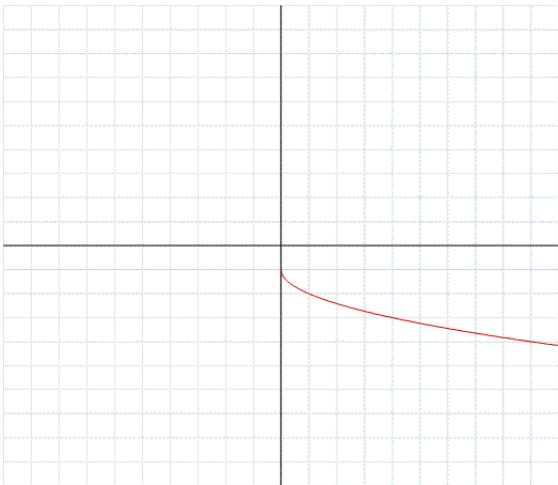
h) \sqrt{x}

2a) $x = 5, -4$ (-4 extraneous)

b) $x = 3, 7$

c) $x = 3, 11$

3a)



b)

