Algebra 1 ECA Remediation Name Answer Key

Homework 29.1

Simplify.

1) $\sqrt{196}$

$= 2 \cdot 7$

$= 14$

2) $3\sqrt{12}$

$3 \cdot 2\sqrt{3} = 6\sqrt{3}$

3) $\sqrt{20x^4}$

x^2

$2x^2\sqrt{5}$

4) $\sqrt{18n}$

$3\sqrt{2n}$

5) $\sqrt{24hj^4k}$

$j^2\sqrt{hk}$

$2j^2\sqrt{6hk}$

6) $\sqrt{8x^2y^3z^3}$

$2xyz\sqrt{2yz}$

7) The school that Natalie goes to is selling tickets to a play. On the first day of ticket sales the school sold 6 adult tickets and 6 child tickets for a total of $138. The school took in $168 on the second day by selling 6 adult tickets and 9 child tickets. Find the price of an adult ticket and the price of a child ticket.

$-6A + 6C = -138$

$6A + 9C = 168$

$3C = 30$

$\frac{3C}{3} = \frac{30}{3}$

$C = 10$

	day 1	day 2
Adult	6	6
Child	6	9
Total	138	168

$6A + 6(10) = 138$

$6A + 60 = 138$

$-60 \quad -60$

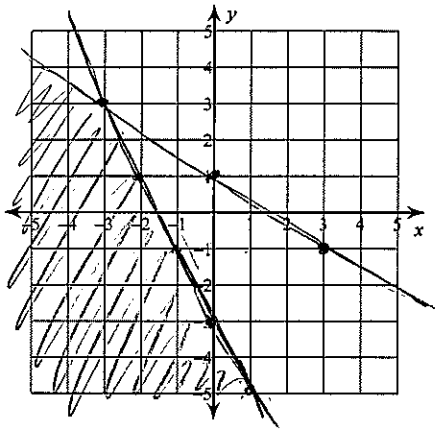
$\frac{6A}{6} = \frac{78}{6}$

$A = 13$

Sketch the solution to each system of inequalities.

8) $y \le -\frac{2}{3}x + 1$ ①

$y \le -2x - 3$ ②



① $m = -\frac{2}{3}$

$b = 1$

Solid

below

② $m = -2$

$b = -3$

Solid

below

Answers to Homework 29.1

1) 14
2) $6\sqrt{3}$
3) $2x^2\sqrt{5}$
4) $3\sqrt{2n}$
5) $2j^2\sqrt{6hk}$
6) $2xyz\sqrt{2yz}$
7) adult ticket: \$13, child ticket: \$10
8)