Algebra 1 ECA Remediation

Name Answer Key

Homework 29.2

Simplify.

1) $\sqrt{144}$

$= 2 \cdot 2 \cdot 3$

$= 12$

2) $8\sqrt{16}$

$= 8 \cdot 2 \cdot 2$

$= 32$

3) $\sqrt{63m}$

$3\sqrt{7m}$

4) $\sqrt{64r}$

$2 \cdot 2 \cdot 2\sqrt{r}$

$8\sqrt{r}$

5) $\sqrt{63a^2bc^2}$

$3ac\sqrt{7b}$

6) $\sqrt{36h^2j^3k^4}$

$= 2 \cdot 3 \cdot h \cdot j \cdot k \cdot k\sqrt{j}$

$= 6hjk^2\sqrt{j}$

7) Molly's school is selling tickets to a choral performance. On the first day of ticket sales the school sold 14 senior citizen tickets and 13 student tickets for a total of \$248. The school took in \$240 on the second day by selling 14 senior citizen tickets and 11 student tickets. What is the price each of one senior citizen ticket and one student ticket?

$14C + 13S = 248$

$-14C + -11S = -240$

$\frac{2S}{2} = \frac{8}{2}$ $S = 4$

	Day 1	Day 2
Senior Citizen	14	14
Student	13	11
	248	240

$14C + 13(4) = 248$

$14C + 52 = 248$

$-52 \quad -52$

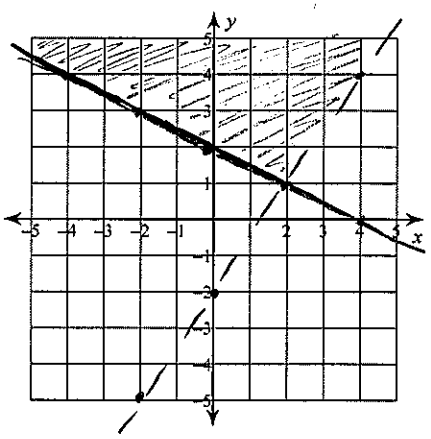
$\frac{14C}{14} = \frac{196}{14}$

$C = 14$

Sketch the solution to each system of inequalities.

8) $y > \frac{3}{2}x - 2$ ①

$y \geq -\frac{1}{2}x + 2$ ②



① $m = \frac{3}{2}$

$b = -2$

dashed

above

② $m = -\frac{1}{2}$

$b = 2$

Solid

above

Answers to Homework 29.2

1) 12
2) 32
3) $3\sqrt{7m}$
4) $8\sqrt{r}$
5) $3ac\sqrt{7b}$
6) $6k^2hj\sqrt{j}$
7) senior citizen ticket: \$14, student ticket: \$4
8)