Chapter 6 Problems of the Week Answers

1. a) Contemporary: $\frac{25}{100}$; Country: $\frac{9}{100}$; Easy

Listening: $\frac{1}{100}$; Golden Oldies/Rock: $\frac{14}{100}$

b) $\frac{49}{100}$ **c)** $\frac{51}{100}$

2. a) Answers may vary. Example: 67, since $\frac{2}{3}$ of

the students have brown eyes and $\frac{1}{2}$ of

students are girls, and $\frac{2}{3}$ of the students play

hockey.

b) Answers may vary. Example: Yes, all the hockey playing girls may have blue eyes and the rest of the $\frac{2}{3}$ of the students who play

hockey may be boys.

3. a) Each red field represents $\frac{1}{4}$ for a total of $\frac{1}{2}$ of

the flag.

b) Answers may vary. Example: About $\frac{1}{4}$ of the

total flag, since it appears to cover about $\frac{1}{2}$ of

the centre field.

4. a) 2; Numbers may vary. Example: 119, 128, 137, 218, 227, 236, 317, 326, 335, 416.

b) Answers may vary. Example: Any three-digit number whose digits add to 11 will leave a remainder of 2 when divided by 9.

c) 1; Numbers may vary. Example: 118, 127, 136, 217, 226, 235, 316, 325, 334, 415.

d) Answers may vary. Example: Any three-digit number whose digits add to 10 when divided by 9 will leave a remainder of 1.

5. Tables may vary. Example:

Developmental Milestone	Fraction of Developmental Period
Size of a kidney bean	$\frac{1}{19}$
Fingerprint	$\frac{3}{38}$
Length of 13 cm	$\frac{9}{19}$
Mass of 680 g	$\frac{14}{19}$
Lungs well developed	$\frac{18}{19}$

6. a) 9936 **b)** 9996

7. 335544, 553344, 355344, 533544, 353 544, 535344