



Math Olympiad and Problem Solving Programs  
F120 - Intermediate Problem Solving  
Problem Set 27.1 - Review

Name:

Date:

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1.  $\boxed{30}$
2.  $\boxed{2}$
3.  $\boxed{1403}$
4.  $\boxed{\$14}$
5. All the factors of 54 are 1, 2, 3, 6, 9, 18, 27, 54. The factors of 81 are 1, 3, 9, 27, 81. Their common factors are  $\boxed{1,3,9,27}$
6.  $\boxed{95}$
7. Decreasing means starting with the largest, going to the smallest.  $\frac{35}{10} = 3\frac{1}{2}$ , which is clearly the largest. Then  $2\frac{4}{5}$ . Since  $\frac{13}{20} > \frac{10}{20}$ , it is greater than  $\frac{1}{2}$ , and  $\frac{2}{5}$  is less than  $\frac{1}{2}$ , so  $\frac{13}{20}$  must be larger.  $\boxed{\frac{35}{10}, 2\frac{4}{5}, \frac{13}{20}, \frac{2}{5}}$
8.  $1\frac{1}{2}$  years has how many months?  $12 + 6 = 18$ . So the fraction is  $\frac{4}{18} = \boxed{\frac{2}{9}}$
9.  $\boxed{\frac{1}{3}}$
10. (a)  $\boxed{64}$  (b)  $\boxed{120}$