



Math Olympiad and Problem Solving Programs

E130 - Honors Geometry Problem Solving

Problem Set 4.2 - SAT Review: Number Theory

Name:

Date:

1. D
2. $(x - 4) + (x - 2) + x + (x + 2) + (x + 4) = 1000 \Rightarrow 5x = 1000 \Rightarrow x = 200$. $x + 4 =$ 204
3. E
4. C
5. B
6. B
7. E
8. $15 - 12 = 3$, so count the factors of 12: 1, 2, 3, 4, 6, 12. Now count the factors of 12 that are NOT factors of 15: 2, 4, 6, 12. Exclude 2 because the remainder when 2 divides 15 is 1. So we are left with 3 numbers. C
9. A
10. C