

MAC1105 College Algebra
1.7 Practice Problems

Solve the following inequalities and write your answer in interval notation.

1. $3x+5>11$

2. $4-2x\leq 44$

3. $3x+4<4x+13$

4. $\frac{4}{5}x - \frac{1}{4} \leq \frac{7}{10}x - \frac{4}{5}$

5. $2x+5>2(x+3)$

6. $4x - 3 \leq 4(x + 1)$

7. $-5 < 2x - 1 < 7$

8. $5 \leq \frac{3x + 1}{2} < 17$

9. Justin can spend no more than \$67 on his monthly cell phone bill. The plan costs \$40 a month for 500 minutes plus \$0.18 per minute for any minutes over the 500 plan minutes. What is the maximum number of minutes that he can use per month?

10. A truck can be rented from Company A for \$160 a day plus \$0.50 per miles. Company B charges \$70 a day plus \$0.80 per mile to rent the same truck. How many miles must be driven in a day to make a rental cost for Company A less than the rental cost of Company B?