

Problem of the Day: Solve and graph the inequality.
 $5(7 - 4x) > -7(1 + 2x)$
 $35 - 20x > -7 - 14x$
 $35 - 6x > -7$
 $-42 > -6x$
 $7 < x$

Plan for the Day: Go over last week's test
 More practice with solving and graphing inequalities
 Homework Week 3 is due TOMORROW
 Objective: We will be able to solve and graph multi-step inequalities.
 Today is the 18th anniversary of 9-11 (also known as Patriot Day) and is National Make Your Bed Day!!

1. $-22x + 12y$
2. $3x + 16$
3. $x = 7$
4. $x = 8$
5. $x = -32$
6. $x = 6$
7. $4 = x$
8. $x = -1$
9. $x = 1$
10. $x = 1$
11. no solution
12. $x = -1$

CADEB
 18. variable
 19. coefficient
 20. equation

21. D
 A
 C
 C
 D
 D
 C
 C
 D
 D
 B

26. $2(-8 + x) = -(4 + x) + x$
 $-16 + 2x = -4 - x + x$
 $-16 + 2x = -4$
 $+16 + 2x = +16$
 $2x = 12$
 $x = 6$

1. $-22x + 12y$
2. $3x + 16$
3. $x = 7$
4. $x = 8$
5. $x = -32$
6. $x = 6$
7. $4 = x$
8. $x = -1$
9. $x = 1$
10. $x = 1$
11. no solution
12. $x = -1$

CADEB
 18. variable
 19. coefficient
 20. equation

12. $-x + 5x = 3(x + 3) - 5(1 - 3x)$
 $-x + 5x = 3x + 9 + 5 + 15x$
 $4x = 18x + 14$
 $-18x - 18x = -18x$
 $-14x = 14$
 $-14x = 14$
 $x = -1$

11. $-(x - 4) - 4(2x - 3) = 1 - 6x + 2 - 3x$
 $-x + 4 - 8x + 12 = 1 - 6x + 2 - 3x$
 $-9x + 16 = -9x + 3$
 $+9x + 16 = +9x + 3$
 $16 = 3$ false
 no solution

D
 C
 C
 D
 D
 B

28. B. $2x^2 + 24x + 8 - 8x^2 - 6x - 7$
 $-6x^2 + 18x - 15$

