Math 05, Homework 4 on Sections 4.1 - 4.3

Write all your working out and answers on a separate sheet. These first ten questions are 2 points each and **their solutions are on page 2**. Check that you get the same answers. If you don't, then look at your notes or the book or ask me. Only do the last eight questions when you are sure you understand the first ten.

It is very important that you show clearly any work you had to do to get your answers. Just writing the answer down with no work shown is not enough.

(1) Is -4 a solution of $-2x^2 + 4 = 7x$?

(2) Is 6 a solution of $3x - 10 > 9$?

(3) Is the ordered pair $(3, -2)$ a solution of $3x - 5y = 1$?

(4) Solve: $3x + 3 = -3$

(5) Solve: $8x = 4$

(6) Solve: $7x - 3 - 5x = 10 + 4x + 3$

(7) Solve: $x + 5(x + 2) = 3(3x - 2) + 18$

(8) Solve: $4(x - 2) - 2 = 4x + 10$

(9) If the sum of three consecutive integers is 42, find the three integers.

(10) Solve for y: $6x + 3y = 4$

These next eight questions are 2 points each. Show clearly all your working out and reasoning.

(11) Is -1 a solution of $5(2 - x) = 15x^2$?

(12) Is the ordered pair $(-2, 0)$ a solution of $3x - 23y = -6$?

(13) Solve: $-x = x$

(14) Solve: $x + 3 + 2x = 2 - x - 7$

(15) Solve: $2x - (x - 3) = 3(4 - x) + 1$

(16) Solve: $3x + 4(x + 1) = 7x + 4$

(17) If the sum of three consecutive integers is 63, find the three integers.

(18) Solve for x: $10x + 2y = 2z$

Answers to questions (1)-(10):

(1) Yes

(2) No

(3) No

(4) $x = -2$

(5) $x = 1/2$

(6) $x = -8$

(7) $x = -2/3$

(8) There are no solutions

(9) The integers are $13,\ 14,\ 15$

(10) $y = -2x + \dfrac{4}{3}$