

Math 05, Homework 4 on Sections 4.1 - 4.3

Hand in by Tue, Mar 1 at the start of class.

Write all your working out and answers on a separate sheet. It is very important that you show clearly any work you had to do to get the answer. These first ten questions are 2 points each and **the answers are on page 2.**

- (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 : $6x + 3y = 4$
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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) $y = -2x + \frac{4}{3}$