Sec 1.2.4 *miscellaneous* Find all values that satisfy the condition $y_1 = y_2$ $\frac{y_1 = 3}{x + 6} + \frac{1}{x - 2} = \frac{3}{x + 6} + \frac{1}{x - 2} = \frac{4}{x^2 + 4x - 12}$ = 4 (x + 6)(x - 2) $x^2 + 4x - 12$

Find all the values that satisfy-
$$y_1 - y_2 = -4$$

$$y_1 = \frac{x+1}{4}$$

$$y_2 = \frac{x-2}{3}$$

$$3(x+1) - 4(x-2) = 48$$

$$3x+3 - 4x+8 = -48$$

$$-x+11 = -48$$

$$-x=-59$$

$$x=-59$$

Find all the values that satisfy-
$$y_{1} + y_{2} = y_{3}$$

$$y_{1} = \frac{2x-1}{x^{2}+2x-8} + \frac{2}{x+4} = \frac{1}{x-2}$$

$$y_{2} = \frac{2}{x+4}$$

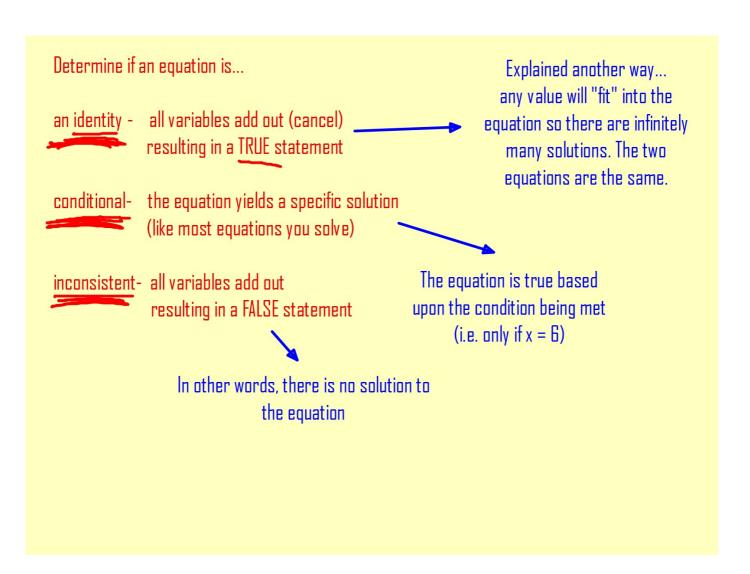
$$2x-1+2(x-2)=x+4$$

$$y_{3} = \frac{1}{x-2}$$

$$2x-1+2x-4=x+4$$

$$4x-5=x+4$$

$$3x=9-x=3$$



Solve and determine whether the equation is conditional, inconsistent or an identity.

$$4x-7=4(x-1)+3$$
 $4x-7=4(x-1)+3$
 $-7=4x-4+3$
 $-7=-1$

NO SolutionS

INCONSISTENT

Same...

$$4x+7=27$$

CONDITIONAL

$$2(x+1) = 2x+2$$

$$2x+2 = 2x+2$$

True, so infinitely many solutions.

IDENTITY

Suggested Practice

Sec 1.2, pg 119 51-67 odds



Solutions-

51. 6

61. identity

53. -7

63. inconsistent

57. 19

65. conditional

59. -1

67. inconsistent