41. $\frac{1}{5}\cdot 5 = 5\cdot\frac{1}{5}$ (M1) 42. $\frac{1}{5}\cdot 5 = 1$ (Transitivity of eq on 41, 28)

43. $1 > \frac{1}{5}\cdot(5\cdot x)$ (Substitute eq 42 in 40)

44. $\left(\frac{1}{5}\cdot 5\right)\cdot x = \frac{1}{5}\cdot(5\cdot x)$ (M2) 45. $\left(\frac{1}{5}\cdot 5\right)\cdot x = 1\cdot x$ (Substitute eq 42)

46. $1\cdot x = x$ (M3) 47. $\left(\frac{1}{5}\cdot 5\right)\cdot x = x$ (Transitivity of eq in 45, 46)

48. $x = \left(\frac{1}{5}\cdot 5\right)\cdot x$ (Symmetry of eq 47)

49. $x = \frac{1}{5}\cdot(5\cdot x)$ (Transitivity of eq on 48, 44)

50. $\frac{1}{5}\cdot(5\cdot x) = x$ (Symmetry of eq 49) 51. $1 > x$ (Substitute eq 50 in 43)

52. $\{x : x\in R, x<1\} \cup \{x : x\in R, x=1\}$ (P

53. $\{x : x\in R, x\not< 1\}$

54. Now, suppose $6-(5x+1) \in \{0\}$ $\therefore 6-(5x+1) = 0$

55. $6-(5x+1) = 6+(-(5x+1))$ (Defn. of subtraction)

56. $-(5x+1) = (-5x)+(-1)$ (Ex 2.1, 2(a))

57. $6+(-(5x+1)) = 6+((-5x)+(-1))$ (Substitute eq 56)

58. $(-5x)+(-1) = (-1)+(-5x)$ (A1)

59. $6+((-5x)+(-1)) = 6+((-1)+(-5x))$ (Substitute eq 58)

60. $(6+(-1))+(-5x) = 6+((-1)+(-5x))$ (A2)

61. $6+((-1)+(-5x)) = (6+(-1))+(-5x)$ (Symmetry of eq 60)

62. $6+((-5x)+(-1)) = (6+(-1))+(-5x)$ (Transitivity of eq on 59, 61)

63. $(6+(-1))+(-5x) = 5+(-5x)$ (Substitute eq 13)

64. $6+((-5x)+(-1)) = 5+(-5x)$ (Transitivity of eq on 62, 63)

65. $6+(-(5x+1)) = 5+(-5x)$ (Transitivity of eq on 57, 64)

66. $6-(5x+1) = 5+(-5x)$ (Transitivity of eq on 55, 65)

67. $5+(-5x) = 6-(5x+1)$ (Symmetry of eq 66)

68. $5+(-5x) = 0$ (Transitivity of eq 67, 54)

69. $(5+(-5x))+5x = 0+5x$ (Substitute eq 68)

70. $0+5x = 5x$ (A3) 71. $(5+(-5x))+5x = 5x$ (Transitivity of eq on 69, 70)

72. $(5+(-5x))+5x = 5+((-5x)+5x)$ (A2)

73. $(-5x)+5x = 0$ (A4) 74. $5+((-5x)+5x) = 5+0$ (Substitute eq 73)