

Problem 1. Solve,

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|--------------------------------|--|
| i) $6r + 7 = 13 + 7r$ | ix) $5 + 2x = 2x + 6$ |
| ii) $13 - 4x = 1 - x$ | x) $-10 + x + 4 - 5 = 7x = 5$ |
| iii) $-7x - 3x + 2 = 8x - 8$ | xi) $-8n + 4(1 + 5n = -6n - 14$ |
| iv) $-8x - x = x - 4x$ | xii) $-6n - 20 = -2n + 4(1 - 3n)$ |
| v) $14 + 5b + 7 - 2b = 1 + 5b$ | xiii) $8x + 4(4x - 3) = 4(6x + 4) - 4$ |
| vi) $n + 2 = -14 - n$ | xiv) $3(1 - 3x) = 2(-4x + 7)$ |
| vii) $n - 3n = 14 - 4n$ | xv) $-3(x - 1) + 8(x - 3) = 6x + 7 - 5x$ |
| viii) $7a - 3 = 3 + 6a$ | |

Problem 2. Solve,

- i) 28 less than five times a certain number is 232. What is the number?
- ii) 15 more than three times a number is the same as ten less than six times the number. What is the number?
- iii) Sixty more than nine times a number is the same as two less than ten times the number. What is the number?
- iv) The sum of three consecutive integers is 93. What are the integers?
- v) The sum of three consecutive even numbers is 246. What are the numbers
- vi) Find three consecutive odd integers so that the sum of twice the first, the second and three times the third is 152.
- vii) The perimeter of a rectangle is 44. The length is 5 less than double the width. Find the dimensions.
- viii) A sofa and a love seat together costs \$444. The sofa costs double the love seat. How much do they each cost?
- ix) A bicycle and a bicycle helmet cost 240 dollars. How much did each cost, if the bicycle cost 5 times as much as the helmet?

- x) Of 240 stamps that Harry and his sister collected, Harry collected 3 times as many as his sister. How many did each collect?
- xi) A lab technician cuts a 12 inch piece of tubing into two pieces in such a way that one piece is 2 times longer than the other.
- xii) The total cost for tuition plus room and board at State University is 2,584 dollars. Tuition costs 704 dollars more than room and board. What is the tuition fee?
- xiii) The cost of a private pilot course is 1,275 dollars. The flight portion costs 625 dollars more than the ground school portion. What is the cost of each?

In addition

In addition to the above the student is responsible for completing All problems in section 3.1.