Section 1 Solution

1) Let x be the number,

Keywords: sum, is

$12 + x = 10$

2) Let x be the number,

Keywords: difference, is

$x - 6 = -4$

3) Let x be the number,

Keywords: twice, decreased, is

$2x - 2 = 11$

4) Let x be the number,

Keywords: times, increased, is

$3x + 7 = -1$

5) Let x be the number,

Keywords: less than, cubed, is

$x^3 - 6 = 15$

6) Let x be the number,

Keywords: squared, added to, is

$8 + x^2 = -5$

7) Let x be the number,

Keywords: times, sum of, is

$5(6 + x) = 24$

8) Let x be the number,

Keywords: twice, sum of, is

$2(x + 10) = -20$

9) Let x be the number,

Keywords: subtracted from, times, sum of, result is

$4x - 3 = 5x + 10$

10) Let x be the number,

Keywords: added to, result is, difference, twice

$6 + x = 2x - 5$

11) Let x be the number,

Keywords: times, is, sum of

$4(x + 10) = -92$

12) Let x be the number,

Keywords: times, difference, is

$6(7 - x) = 12$

Section 1 Solution

13) Let x be the number,

Keywords: subtracted from, the result is, more than, product of

$94 - x = 5x + 19$

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14) Let x be the number,

Keywords: added to, twice, result is, difference of, times

$2x + 3 = 4x - 5$

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15) Let x be the number,

Keywords: subtracted from, times, is equal to, sum of, squared

$9x - 8 = 6 + x^2$

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16) Let x be the number,

Keywords: sum of, is equal to, cubed, added to

$12 + x = 5 + x^3$

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17) Let x be the number,

Keywords: times, difference of, is equal to, sum of, cubed

$11(x - 42) = x^3 + 10$

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18) Let x be the number,

Keywords: product of, added to, is equal to, squared, increased by

$3 + 6x = x^2 + 8$

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19) Let x be the number,

Keywords: subtracted from, squared, result is, twice, sum of, times

$x^2 - 7 = 2(5x + ?)$

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20) Let x be the number,

Keywords: times, difference of, twice, cubed, less than, is equal to

$6(2x - 1) = 16 - x^3$
