1.1 Writing and Translating Algebraic Expressions

KEYWORDS: (operations)

+ - add, plus, sum → and, increased by, more than, added to

- subtract, minus, difference → and, decreased by, less than, subtracted from

× - multiply, times, product → and, twice (×2), of (fractions)

÷ - divide, quotient → and

*Commas show separation... may need parentheses

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Examples:

1. The product of twelve and a number

   $$12x$$

2. One eighth of a number

   $$\frac{1}{8}x$$

3. The difference between a number and five

   $$x - 5$$

4. Fifteen more than a value

   $$x + 15$$

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5. Twice a number increased by four

   $$2x + 4$$

6. Thirteen decreased by eight times a number

   $$13 - 8x$$

7. the quotient of a number and twelve

   $$\frac{x}{12}$$

8. Seven times a number, decreased by the square root of three

   $$7x - \sqrt{3}$$

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9. Twice the sum of eight and a number

   $$2(8 + x)$$

Twice the sum
$$2(\ + \ )$$

Twice the difference
$$2(\ - \ )$$

Three times the sum
$$3(\ + \ )$$

Three times the difference
$$3(\ - \ )$$

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10. Four less than three times a number

    $$3x - 4$$

11. The quotient of a number and seven, minus five

    $$\frac{x}{7} - 5$$

12. Four times a number decreased by twice the same number

    $$4x - 2x$$

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13. Fifteen less than a number

    $$x - 15$$

14. The difference between four and the square of a number

    $$4 - x^2$$

15. Twenty less than six times a number

    $$6x - 20$$

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HOMEWORK:

Worksheet - HW 1.1

Translating Expressions