

Unit 4: Equalities Day 3

Math 9 Principles

4-2 I can solve equations using zero sums and multiplying and dividing coefficients.

Combine like terms first, then solve for x

1) $4(x - 2) = 2(x + 3)$	2) $-5(x - 1) + 3 = -2(x + 3) - 8$
3) $-2(4x + 1) + 3x - 7 = 2(x + 2) + 7x - 1$	4) $-3(x + 4) - (x - 1) = 8(x - 2)$
5) $5 - 2(x - 4) - 3x = 4(x + 2)$	6) $7(x - 3) - 2(3x + 4) = 5(3x - 2)$
7) $2x - 6 = -5 - 4x$	8) $24 - 4x = 15 - x$

$$9) 6x - 8 = 4 - 3x$$

$$10) -5x + 9 = 3x - 15$$

$$11) -2x + 3 = -7x - 5$$

$$12) 2(x - 3) = -3(x + 4)$$

$$13) 5 + 2(x - 3) = -2(x + 4) - 5$$

$$14) 4(x - 2) + 5 = 3 + 2(x - 3)$$

$$15) -(x + 4) = 3(-x + 5) - 8$$

$$16) 3(x - 2) + 12 = 6x - 3(4 - x)$$

Write each word problem as an equation and solve showing all steps. Circle your answer.

<p>17) The sum of 27 and five times a number is 38. Find the number.</p>	<p>18) If 35 is added to three times a number, the result is 101. Find the number.</p>
<p>19) A number is increased by 45. The result is multiplied by 2. The result is 18 less than the original number. Find the number.</p>	<p>20) Four times a number, increased by 36, is the same as 32 decreased by twice the number. Find the number.</p>
<p>21) The sum of two consecutive integers is -75. What is the smallest integer?</p>	<p>22) 23 more than twice a number is 15. What is the number?</p>
<p>23) Twelve less than five times a number is thirty-three. What is the number?</p>	<p>24) Five times a certain number is the same as the number decreased by 52. Find the number.</p>
<p>25) Six times the sum of a number and 15 is 99 more than three times the number. What is that number?</p>	<p>26) Three times a number, decreased by 14, is the same as 22 decreased by five times the number. Find the number.</p>