

Math Study Guide 7th Grade Unit 2

1. Solve: $5x + 10 = -15$ CC.7.EE.3

2. Simplify: $(-4a + b - 2c) - (3a + 2b - c)$ CC.7.EE.1

3. Rewrite the expression using the distributive property: $12x + 18$ CC.7.EE.2

4. Rewrite the expression using the distributive property. $30x + 6$ CC.7.EE.2

5. Your bank account balance was \$235.24. After 2 checks were cashed (each for the same amount) your balance is now -\$45.58. What was the amount of each of those checks? CC.7.EE.4

6. Cam bought the items listed on the sign. If he was charged \$42.25 for which item was he charged twice? CC.7.EE.4

Socks....\$4.50
Hats.....\$12.75
t-shirts \$12.25

7. Rich bought 5 cupcakes and one pie. He knows his total bill and knows the pie was \$6.89, but he wants to find the price of the cupcakes. How can he determine the price of each cupcake? CC.7.EE.4

8. Which choice is equivalent to the expression $-2(5y - x) + 3(2x - 6y)$? CC.7.EE.2

A. $-16y - 5x$ B. $-16y - 7x$ C. $-28y + 4x$ D. $-28y + 8x$

9. Solve: $-3x + 12 = 48$ CC.7.EE.4

10. Solve: $-2(x - 4) = -8$ CC.7.EE.4

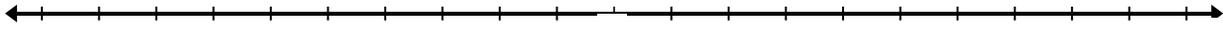
11. Evaluate: $1.5x + 120 \geq 270$ CC.7.EE.4

12. Bo Peep needs to buy 10 new sheep
 - Farm M: one sheep costs \$20
 - Farm Q: set of 5 sheep costs \$75
 How much money will Bo Peep save if she goes with Farm Q? CC.7.EE.4

13. Write a problem that can be solved using the equation: $9x + 14 = 100$ CC.7.EE.4

- A. 9 dogs and 14 cats cost \$100.
- B. Ty wants to buy 14 dogs, but they cost \$100, how much more does he need?
- C. Ty has saved \$14 and he earns \$9 each week. How many weeks will it take till he has \$100?

14. Label the number line below and draw the solution set for $x + 12 < 8$? CC.7.EE.4



15. Which inequality represents “nine more than three times a number is greater than 21”. CC.7.EE.4

- A. $9n > 21$ B. $9 + 3 > 21$ C. $3n + 9 > 21$ D. $9n + 3 > 21$

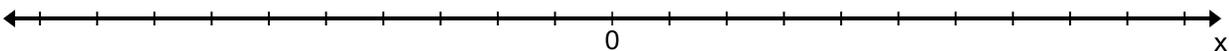
16. Frank has saved \$15 towards the \$95 phone he want to buy. He makes \$5 per week delivering papers. How many weeks must he work until he has enough money? CC.7.EE.4

17. If you have $x - 4$ and subtract $\frac{1}{4}x + 5$ from it, the result is: CC.7.EE.1

18. Which of the following equations is equivalent to $9x - 12 = 36$? CC.7.EE.2

- A. $9x = 24$ B. $9x = 48$ C. $x - 12 = 4$ D. $x + 9 = 4$

19. Graph the inequality: $5y + 3 \leq -42$ CC.7.EE.4



20. Mel cleans houses. CC.7.EE.4

- She earns \$7.50 every hour that she dusts.
- She earns \$10.00 every hour that she scrubs floors.
- She scrubbed floors for 1 ½ hours and dusted for 2 hours.

How much money did Mel earn?

21. Label and graph the inequality: $4x - 8 > 24$ CC.7.EE.4

