

Math Study Guide 7<sup>th</sup> 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?

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

CC.7.EE.4

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  $-2(-x + 5y) + 3(2x - 6y)$  ?

CC.7.EE.2

A.  $-5x - 16y$

B.  $-7x - 8y$

C.  $4x - 28y$

D.  $8x - 28y$

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

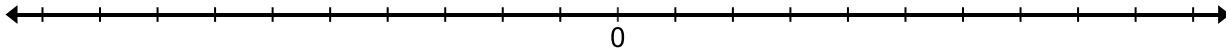
- Farm M: one sheep costs \$20
- Farm Q: set of 5 sheep costs \$75

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

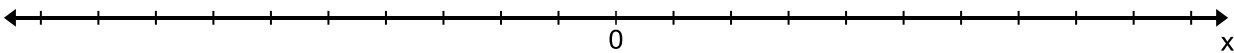


15. Which inequality represents “nine more than three times a number is greater than 21”. CC.7.EE.4
- A.  $9n > 21$       B.  $9 + 3 > 21$       C.  $3n + 9 > 21$       D.  $9n + 3 > 21$
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16. Frank has saved \$15 towards the \$95 phone he want to buy. He makes \$5 per week delivering papers. How many weeks must he work until he has enough money? CC.7.EE.4
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17. 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.  $x + 9 = 4$
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18. Graph the inequality:  $5y + 3 \leq -42$  CC.7.EE.4



19. 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  $1\frac{1}{2}$  hours and dusted for 2 hours.
- How much money did Mel earn?