

Math 9
Assignment 6.3 & 6.4

Name _____

Date _____

Solve each of the following and draw the solution on a number line

1. $x + 7 \geq 12$

2. $11 + y > 17$

3. $k + \frac{1}{5} < \frac{3}{10}$

4. $\frac{3}{2} + a < -\frac{5}{2}$

5. $2 > y + 10$

6. $7 + p > -13$

7. $-15 > m - 10$

8. $x - 21 \leq -25$

9. $-4 < c - 2\frac{1}{2}$

10. $3k \geq 21$

11. $-8 \geq 8x$

12. $15 < -k + 8$

13. $-17 \geq -9 - m$

14. $4w - 17 \geq 3$

15. $34 < -8a + 26$

16. $1 > -4c + 7 - 2c$

17. $7 \leq 6m + 8 - 3m$

18. $2n - 11 > 3n + 5$

19. $8r - 6 \leq 10r + 5$

20. $7m + 21 - 15m > -4m - 6 - 13m$

21. $7(3 - 4n) < 12n - 19$

22. $7k - 12 \geq 9(2k - 3)$

23. $4s + 13 \leq 6(4 - 5s)$

24. $95 < 10(14 - c) + 5c$

25. $1000 < x^5 < 1100$ where x is an integer. Find x .
26. What is the greatest integer x such that $2^x < 10000$
27. How many integral values exist for x such that $\frac{1}{4} < \frac{x}{5} < \frac{2}{3}$?
28. For what whole number n is $10^n < 695\,000 < 10^{n+1}$?
29. For how many positive integers n is $2n + 7 < 23$?
30. What is the greatest integer value for m such that $5m - 3 > 8m + 21$?
31. Joe and Millie each have some baseball cards, and $\frac{3}{4}$ of the number of cards Joe has is equal to $\frac{2}{3}$ of the number of cards Millie has. What is the least number of cards they could have altogether?
32. Coach Kooch is ordering ribbons for awards. He needs 20 ribbons. The ribbons cost 30¢ each when 20 or fewer are ordered. For orders of 21 or more, the cost is reduced to 27¢ each. What is the largest number of ribbons that the coach can buy and still spend less than the cost of 20 ribbons?

Answer List

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|----------------------------|----------------------------|-----------------------|
| 1. | 2. $y > 6$ | 3. $k < \frac{1}{10}$ |
| 4. $a < -4$ | 5. $y < -8$ | 6. $p > -20$ |
| 7. $m < -5$ | 8. $x \leq -4$ | 9. $c > -\frac{3}{2}$ |
| 10. $k \geq 7$ | 11. $x \leq -1$ | 12. $k < -7$ |
| 13. $m \geq 8$ | 14. $w \geq 5$ | 15. $a < -1$ |
| 16. $c > 1$ | 17. $m \geq -\frac{1}{3}$ | 18. $n < -16$ |
| 19. $r \geq -\frac{11}{2}$ | 20. $m > -3$ | 21. $n > 1$ |
| 22. $k \leq \frac{15}{11}$ | 23. $s \leq \frac{11}{34}$ | 24. $c < 9$ |
| 25. 4 | 26. 13 | 27. 2 (values) |
| 28. 5 | 29. 7 (integers) | 30. -9 |
| 31. 17 (cards) | 32. 22 (ribbons) | |

Catalog List

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|----------------|----------------|----------------|
| 1. | 2. ALG OA 2 | 3. ALG OA 4 |
| 4. ALG OA 9 | 5. ALG OA 7 | 6. ALG OA 12 |
| 7. ALG OA 25 | 8. ALG OA 26 | 9. ALG OA 28 |
| 10. ALG OA 37 | 11. ALG OA 55 | 12. ALG OA 91 |
| 13. ALG OA 100 | 14. ALG OA 112 | 15. ALG OA 156 |
| 16. ALG OB 4 | 17. ALG OB 6 | 18. ALG OB 21 |
| 19. ALG OB 23 | 20. ALG OB 40 | 21. ALG OB 46 |
| 22. ALG OB 47 | 23. ALG OB 48 | 24. ALG OB 52 |
| 25. MCC BD 2 | 26. MCC BD 12 | 27. MCC BD 58 |
| 28. MCC BD 82 | 29. MCC BD 74 | 30. MCC BD 71 |
| 31. MCC BD 66 | 32. MCC BD 55 | |