Pre-Algebra Chapter 7 STUDY GUIDE

Multiple Choice
Identify the choice that best completes the statement or answers the question.

D

1. Ms. Baker purchased a number of juice packs at a cost of \$0.30 each and a loaf of bread that cost \$1.19. The total cost of her purchases was \$2.99. Which equation can you use to determine how many juice packs Ms. Baker purchased?

   a. $2.99 - 1.19j = 0.30$
   c. $1.19j + 0.30j = 2.99$
   b. $0.30j + 2.99 = 1.19$
   d. $0.30j + 1.19 = 2.99$

B

2. Solve $\frac{9}{11}v - 33 = -\frac{5}{11}v - 6$.

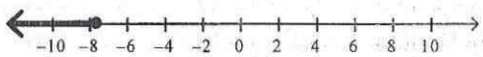
   $\frac{14}{11}v = \frac{27}{1} \cdot \frac{11}{14}$ $\left(\frac{297}{14}\right)$

   a. $v = 22$
   b. $v = 21\frac{3}{14}$
   c. $v = -74\frac{1}{4}$
   d. $v = 30\frac{9}{14}$

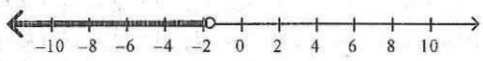
B

3. Solve $m - 3 > -4.5$. Then graph the solution set on a number line.

   a. $m > -7.5$

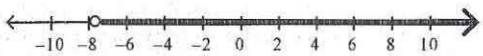
   c. $m > -1.5$

   b. $m > -1.5$

   d. $m > -7.5$

4. Solve $\frac{y}{3} > 0.6$.

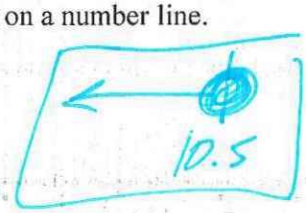
   $y > 1.8$

5. Solve $\frac{y}{-7} - 0.5 \geq -2$. Then graph the solution set on a number line.

   $\frac{y}{-7} \geq -1.5$

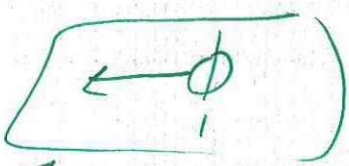
   $\frac{3}{-1.5}$
   7
   10.5

   $y \leq 10.5$

6. Solve and graph.
   $n - 8 + 3n < -4$

   $4n - 8 < -4$
   $+8 \quad +8$
   $\frac{4n}{4} < \frac{4}{4}$
   $n < 1$

Solve the equation.

7. $\frac{x}{-4} + 28 = -5$

$\frac{x}{-4} = -33 \cdot -4$

$x = 132$

8. $-4x - 4 = 4$

$-4x = 8$

$x = -2$

9. $4m + 3m = 28$

$7m = 28$

$m = 4$

10. $46 = -2(m + 7) + m$

$46 = -2m - 14 + m$

$60 = -m$

$-60 = m$

11. $6 = 4(x + 8) - 5x$

$6 = 4x + 32 - 5x$

$x = 26$

12. $\frac{1}{5}y - 5 = 5$

$y = 50$

13. $0.1x + 10 = 38$

$.1x = 28$

$x = 280$

14. $12 + 0.35x = 20.05$

$.35x = 8.05$

$x = 23$

$35 \overline{)805}$ 23

70

105

-105

0

15. $5x + 4 = 3x - 6$

$2x = -10$

$x = -5$

16. $x + 9 = 5(4x - 2)$

$x + 9 = 20x - 10$

$19 = 19x$

$1 = x$

17. $-6p + 21 = 9p - 12$

$\frac{33}{15} = \frac{15p}{15}$

$2\frac{1}{5} = p$

* Don't forget "let" statements

18. The sum of three consecutive integers is 108. Find the integers.

$n + (n+1) + (n+2) = 108$

$3n + 3 = 108$

$\frac{3n}{3} = \frac{105}{3}$

$n = 35$

35, 36, 37

Solve and graph the inequality.

19. $6m - 6 \leq 18$

$6m \leq 24$

$m \leq 4$

20. Solve the perimeter formula for an isosceles triangle, $P = 2a + b$, for b.

$P - 2a = b$

21. Jordan invested $500 in a savings account. The interest rate is 3% per year. Find the simple interest earned in 4 years. Then find the total of principal plus interest.

$500 \times .03 \times 4 = \$60$ $\$560$

22. Find the balance on a deposit of $1,050 that earns 7% interest compounded annually for 3 years.

$1050(1+.07)^3$

$\$1376.34$

*"Let" statement

23. The Party Room at Penny's Pizza rents for an initial fee of $30 and then $5 per hour. Aislyn's bill for her birthday party was $45. For how many hours did she rent the room?

$30 + 5x = 45$

$\frac{5x}{5} = \frac{15}{5}$

$x = 3$

3 hours