

Algebra 1
Practice Chapter 2 Test

NAME _____

Write the letter for the best answer in the blank at the right. (3 Points)

Translate the sentence into an equation for #1-3.

1. *The sum of twice a number x and 13 is three times x less than two.*

A. $2(x + 13) + 3x - 2$

B. $2x + 13 = 2 - 3x$

C. $2x + 13 = 3x - 2$

D. $2x + 13 = 3(x - 2)$

2. *Two times a number m minus three equals the product of m and five.*

A. $2(m - 3) = m + 5$

B. $2m - 3 = m + 5$

C. $2m - 3 = 5m$

D. $2(m - 3) = 5m$

3. *The sum of five and a number y is two minus the quotient of four and y .*

A. $5 + y = \frac{4}{y} - 2$

B. $5y = \frac{4}{y} - 2$

C. $5y = 2 - \frac{4}{y}$

D. $5 + y = 2 - \frac{4}{y}$

4. Solve $y - 16 = 7$

A. 13

B. 23

C. -13

D. -23

5. Solve $3x = -21$

A. 7

B. -7

C. 24

D. -24

6. Solve $\frac{2}{5}x = 16$

A. 8

B. 20

C. 40

D. 85

7. Solve $y + 15 = 9$

A. 6

B. 24

C. -6

D. -24

8. Solve $x - 11 = -27$

A. -16

B. 16

C. -38

D. 38

9. Solve $7x - 13 = -55$

A. 6

B. 294

C. -6

D. -294

10. Solve $5x + 8 = 33$

A. $\frac{41}{5}$

B. 5

C. 12

D. 125

11. Solve $44 = -10 + 6y$

A. 7

B. $\frac{27}{3}$

C. 9

D. 60

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

Points(33) _____

12. Solve $6x - 5 = 3x + 1$

- A. 2 B. $\frac{5}{2}$ C. $\frac{5}{6}$ D. 6

13. Solve $8(x - 3) = 2(x - 11)$

- A. $\frac{1}{3}$ B. -9 C. $-\frac{29}{3}$ D. \emptyset

14. Solve $6(x + 6) = 3(2x + 12)$

- A. 18 B. 54 C. \mathcal{R} D. \emptyset

15. Solve $5(x - 2) + 3x = 11(x + 1)$

- A. -15 B. $\frac{18}{3}$ C. $-\frac{21}{19}$ D. -7

16. Solve $4x + 2(x + 7) = 5(x + 3)$

- A. $\frac{1}{2}$ B. 11 C. $\frac{1}{11}$ D. 1

17. Solve $\frac{1}{4}x + 4 = \frac{1}{8}x - 3$

- A. 4 B. $\frac{5}{6}$ C. $-\frac{56}{3}$ D. -56

18. Solve $\frac{2}{3}x + \frac{5}{2} = \frac{1}{6}x + \frac{4}{3}$

- A. $-\frac{7}{3}$ B. $-\frac{10}{3}$ C. $-\frac{17}{3}$ D. $-\frac{19}{3}$

19. Solve $\frac{x}{8} + 12 = 4$

- A. 64 B. -64 C. 128 D. -128

20. Solve $\frac{4}{x} = \frac{2}{18}$

- A. 18 B. $\frac{3}{11}$ C. $\frac{72}{5}$ D. 36

21. Solve $\frac{x}{3} = \frac{x + 6}{5}$

- A. 9 B. -8 C. \emptyset D. 6

22. Solve $10x + 17 + 4x - 9 = 15x + 11 + 2x - 7 - 9x + 34$

- A. 5 B. 8 C. 12 D. 15

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

21. _____

22. _____

Points(33) _____

23. Evaluate $|x - 8| + 15$ when $x = -4$.
A. 3 B. 27 C. 19 D. 11

24. Evaluate $2|-3x + 2| + 1$ when $x = 4$.
A. -19 B. -27 C. 21 D. 29

25. Solve $|x - 6| = 17$
A. $\{-23, 11\}$ B. $\{-11, 11\}$ C. $\{-11, 23\}$ D. $\{-23, 23\}$

26. Solve $|x + 12| = 28$
A. $\{-16, 16\}$ B. $\{-40, 40\}$ C. $\{-16, 40\}$ D. $\{-40, 16\}$

27. Solve $|2x + 8| = 18$
A. $\{-5, 5\}$ B. $\{-5, 13\}$ C. $\{-13, 5\}$ D. $\{\emptyset\}$

28. Solve $xy + w = z$ for x
A. $\frac{w - z}{y}$ B. $\frac{-w + z}{y}$ C. $\frac{-wz}{y}$ D. $-\frac{z}{y} + w$

29. Which ratio forms a proportion with $\frac{8}{28}$?
A. $\frac{1}{4}$ B. $\frac{6}{24}$ C. $\frac{7}{26}$ D. $\frac{2}{7}$

30. Which ratio forms a proportion with $\frac{24}{18}$?
A. $\frac{3}{4}$ B. $\frac{5}{6}$ C. $\frac{20}{14}$ D. $\frac{4}{3}$

31. Find the total price of a pair of \$49.99 shoes at 6% tax.
A. \$45.92 B. \$46.99 C. \$54.77 D. \$52.99

32. Find the total price of a \$599.99 television at 25% discount.
A. \$149.99 B. \$449.99 C. \$479.99 D. \$499.99

33. Find the percent increase from a gallon of gas that was \$2.99 and is now \$3.99.
A. 18% B. 23% C. 25% D. 33%

23. _____

24. _____

25. _____

26. _____

27. _____

28. _____

29. _____

30. _____

31. _____

32. _____

33. _____

Points(33) _____