

Chapter 6 Practice test

SCORE _____

Write the letter for the correct answer in the blank at the right of each question. $2x+3=57$
 $EDWIN = X$ $EMOTHER = 2x+3$

1. Edwin's mother is 57 years old. Her age is three years more than twice Edwin's age. What is Edwin's age?
 A. 30 years B. 27 years C. 15 years D. 37 years 1. B

2. In a basketball game, Benito scored 3 points less than twice the number of points Carnell scored. Carnell scored 8 points. How many points did Benito score? $2x-3 =$
 F. 5 points G. 11 points H. 13 points I. 16 points 2. H

What is the solution of each equation?

3. $t + 16 = 7$ *SUBTRACT 16*
 A. -23 B. -9 C. 9 D. 23 3. B

4. $\frac{w}{4} = -11$ *MULTIPLY BY 4*
 F. -44 G. -7 H. 7 I. 44 4. F

5. $81 = 3k$ *DIVIDE BY 3*
 A. 27 B. 78 C. 84 D. 243 5. A

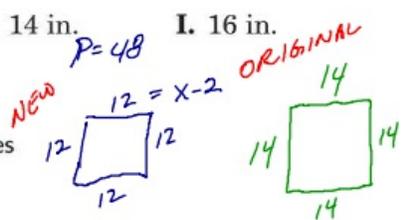
6. $-8 + \frac{5}{6}x = -28$ *ADD 8 THEN MULTIPLY BY $\frac{6}{5}$ ← $\frac{6}{5}$ IS THE RECIPROCAL OF $\frac{5}{6}$*
 F. -24 G. -20 H. -4 I. 24 6. F

7. $\frac{1}{2}z = 9\frac{1}{4}$ *MULTIPLY BY $\frac{2}{1}$ $\frac{2}{1}$ IS THE RECIPROCAL OF $\frac{1}{2}$*
 A. $4\frac{5}{8}$ B. $9\frac{1}{8}$ C. $18\frac{1}{4}$ D. $18\frac{1}{2}$ 7. D

8. $37 = 18q + 1$ *SUBTRACT 1 THEN DIVIDE BY 18*
 F. 0.5 G. 2 H. 12 I. 19 8. G

9. $2y - 1.7 = 3.3$ *ADD 1.7 THEN DIVIDE BY 2*
 A. 0.8 B. 2.5 C. 3.2 D. 10 9. B

10. The length of each side of a square was decreased by 2 inches, so the perimeter is now 48 inches. What was the original length of each side of the square?
 F. 10 in. G. 12 in. H. 14 in. I. 16 in. 10. H



STEP 1
CANCEL THE
CONSTANT

STEP 2
CANCEL THE
COEFFICIENT JB

$$\boxed{-8} + \frac{5}{6}x = -28$$

$+8$

$$\boxed{\frac{6}{5} \left(\frac{5}{6}x \right)} = \left(-20 \right) \frac{6}{5}$$

$$x = -24$$

$$\frac{6}{5} \cdot \frac{5}{6} = \frac{30}{30} = 1$$

Chapter 6 Practice test (continued)

What is an equivalent equation for each given equation?

SUBTRACT 11 THEN DIVIDE BY 4

11. $4x + 11 = 15$

A. $4x = 26$

B. $-4x + 11 = -15$

C. $15 = -11 - 4x$

D. $4x = 4$

11. D

DIVIDE BY 3 THEN ADD 9

12. $3(x - 9) = 3$

F. $3x - 9 = 3$

G. $3x - 9 = 9$

H. $x - 9 = 1$

I. $x - 9 = 9$

12. H

Solve each equation. Check your solution.

13. $0.3a = 51$ *DIVIDE BY 0.3*

13. 170

14. $\frac{z}{5.2} = 16$ *MULTIPLY BY 5.2*

14. 83.2

15. $-11 = x + 5$ *SUBTRACT 5*

15. -16

16. $3j = 2.7$ *DIVIDE BY 3*

16. 0.9

17. $\frac{x}{8} - 2 = -3$ *ADD 2 THEN, MULTIPLY BY 8*

17. -8

18. $-0.4(x - 3.8) = -2$ *DIVIDE BY -0.4, THEN ADD 3.8*

18. 8.8

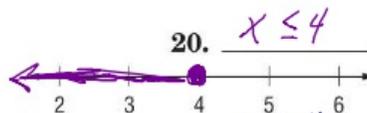
19. Each deli sandwich made uses $\frac{1}{4}$ pound of turkey. Tyler started with $3\frac{7}{8}$ pounds of turkey and now has $1\frac{5}{8}$ pounds left. How many deli sandwiches did he make?

$3\frac{7}{8} - 1\frac{5}{8} = 2\frac{2}{8} = 2\frac{1}{4}$ *← AMOUNT USED*
 $2\frac{1}{4} \div \frac{1}{4} = 9$

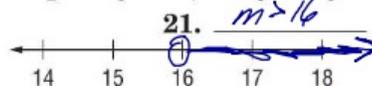
19. 9

Solve each inequality. Graph the solution on a number line.

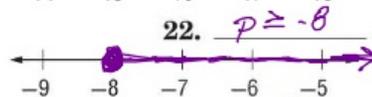
20. $x + 7 \leq 11$ *SUBTRACT 7*



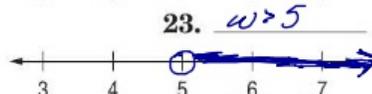
21. $m - 4 > 12$ *ADD 4*



22. $3p \geq -24$ *DIVIDE BY 3*



23. $-2w + 5 < -5$ *SUBTRACT 5, THEN DIVIDE -2*
↑ REVERSE INEQUALITY



24. $\frac{h}{-6} > 3$ *MULTIPLY BY -6*
↑ REVERSE INEQUALITY

