

Chapter 2
Form F

Choose the correct answer to each problem.

For problems 1 – 6, solve the equation.

1. $14x - 21 = 7$
a. -1 b. 1 c. -2 d. 2
2. $15x - 8 + 7x - 6 = 22x - 14$
a. -28 b. 28 c. No Solution d. All real numbers
3. $7(z - 2) = -3(4 - z)$
a. 2 b. $\frac{1}{2}$ c. $\frac{13}{5}$ d. $-\frac{13}{5}$
4. $18 - 8(y + 2) = 2(y - 9)$
a. 2 b. $-\frac{5}{2}$ c. No solution d. All real numbers
5. $\frac{x}{12} + \frac{x}{4} = \frac{7}{24} + x$
a. $\frac{7}{16}$ b. $-\frac{5}{16}$ c. $-\frac{7}{16}$ d. $\frac{5}{16}$
6. $4t - (1 - t) = 2(3t - 4) - t$
a. 1 b. -1 c. No solution d. All real numbers

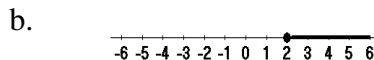
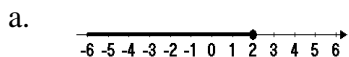
For problems 7 – 10, choose the correct expression of the solution set.

7. $-7x + 11 \leq -3$
a. $\{x \mid x \geq 2\}$ b. $\{x \mid x \leq 2\}$ c. $\left\{x \mid x \geq -\frac{8}{7}\right\}$ d. $\left\{x \mid x \leq -\frac{8}{7}\right\}$
8. $2(x + 4) < 6 + 2x$
a. $\{x \mid x > 2\}$ b. $\{x \mid x < 2\}$
c. $\{x \mid x \text{ is a real number}\}$ d. No solution

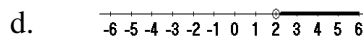
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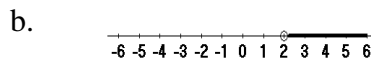
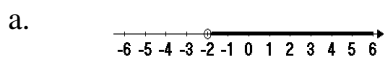
9. $6 - 5(x - 1) < x - 1$



c. $\{x \mid x \text{ is a real number}\}$



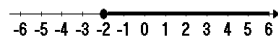
10. $9x - 2(3 - x) > 10x - (8 - x)$



c. $\{x \mid x \text{ is a real number}\}$

d. No solution

11. Use set-builder notation to describe the following graph.



a. $\{x \mid x \geq 2\}$

b. $\{x \mid x \leq 2\}$

c. $\{x \mid x \geq -2\}$

d. $\{x \mid x \leq -2\}$

12. Solve $B = 7a^2b$ for b .

a. $b = B - 7a^2$

b. $b = 7 \frac{B}{a^2}$

c. $b = B + 7a^2$

d. $b = \frac{B}{7a^2}$

13. Solve $C = \frac{5}{9}(F - 32)$ for F .

a. $F = \frac{5}{9}C - 32$

b. $F = \frac{5}{9}C + 32$

c. $F = \frac{9}{5}C + 32$

d. $F = \frac{9}{5}C - 32$

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14. 60% of 500 is what number?
a. $\frac{6}{5}$ b. 30 c. 3000 d. 300
15. 70 is what percent of 200?
a. 28.6% b. 35% c. 0.286% d. 350%
16. A cord of wood is a rectangular stack of wood measuring 4 feet wide, 4 feet high and 8 feet long. Find the volume of a half cord of wood.
a. 32 ft^3 b. 16 ft^3 c. 64 ft^3 d. 128 ft^3
17. Three times the sum of 5 and a number is 69. Find the number.
a. 18 b. 28 c. 13 d. 33
18. You pay \$56 for each of 2 tires which are marked 30% off. After the sale is over, you realize you need 2 more tires. How much will each of the two tires cost at regular price?
a. \$84 b. \$186.67 c. \$39.20 d. \$80
19. The sum of two consecutive odd integers is 0. Find the two integers.
a. -13 and 13 b. -3 and 3 c. 0 and 1 d. -1 and 1
20. The width of a rectangle is 29 centimeters. Find all possible values for the length of the rectangle if the perimeter is at least 752 centimeters. Let x represent the length.
a. $x \geq 188 \text{ cm}$ b. $x \geq 405 \text{ cm}$ c. $x \geq 347 \text{ cm}$ d. $x > 723 \text{ cm}$