1-7

Homework *(what you don't finish in class)*

Use the Distributive Property to simplify each expression.

1. $7(z - 4)$

2. $3(2 + w)$

3. $(2h - 4)11$

4. $(6y - 3)5$

5. $17(2b + 3)$

6. $12(4 - 8p)$

7. $7(11 - n)$

8. $(1 - 11j)4$

Write each fraction as a sum or difference.

9. $\dfrac{2x + 3}{3}$

10. $\dfrac{11n - 14}{9}$

11. $\dfrac{5t - 12}{10}$

12. $\dfrac{24k + 18}{6}$

Simplify each expression.

13. $-1(p + 6)$

14. $-(-9 - 4y)$

15. $-(a - 15)$

16. $-(-z - 12)$

Use mental math to find each product.

17. 2.1×6

18. 12×6.8

19. 49×7

20. 14×11

21. You buy 125 tickets to an amusement park that each cost \$19.50. What is the total cost of the 125 tickets? Use mental math.

22. There are 12 sections in the stadium. Each section of the stadium can seat 1500 people. What is the total seating capacity of the stadium? Use mental math.

1-7 Homework

Simplify each expression by combining like terms.

23. $9y + 11y$ **24.** $23b - 19b$

25. $35t - 42t$ **26.** $-4p + 2p$

27. $-10x^2 - 14x^2$ **28.** $-5k^2 + 6k^2$

29. $7w^2 - 14w^2$ **30.** $6a - 7 + 4 - a$

Write a word phrase for each expression. Then simplify each expression.

31. $3(c + 5)$ **32.** $-7(n - 1)$

33. The profit a company receives is given by the expression $0.15(855p - 315)$ where p is the number of products sold. Rewrite this expression using the Distributive Property. What is the profit for 25 products sold and 150 products sold? Use mental math.

Simplify each expression.

34. $7xy - xy + 3xy$ **35.** $25pq + 13pq - 6 - 35pq + 4$

36. $5m^2n - 3mn^2 - 7m^2n$ **37.** $3(-6fg - 4)$

38. $-vw^2 + vw - v^2w - 3vw^2 + 2v^2w$ **39.** $x + \dfrac{x}{4} - \dfrac{3x}{4}$

40. Reasoning Demonstrate why $\dfrac{15x - 5}{5} \neq 3x - 5$. Show your work.

Simplify each expression.

41. $3(x + 4) + 2(5x + 2)$ **42.** $3(2n - 7) + 7(4 - 2n)$ **43.** $5(5 + t) - 3(t - 6)$