

Practice 1-5

Properties of Numbers

Determine whether each equation is true or false.

1. $9 \cdot 8 + 6 = 9 \cdot 6 + 8$

2. $-7(11 - 4) = 7(15)$

3. $12 \cdot 7 = 10 \cdot 7 + 2 \cdot 7$

4. $15 + (-17) = -17 + 15$

5. $93 \cdot (-8) = -93 \cdot 8$

6. $53 + (-19) = -53 + 19$

Use mental math to simplify each expression.

7. $8 + (-2) + 7 + (-5)$

8. $65 + 23 + 35$

9. $17 + (-9) + 18 + (-11)$

10. $220 + 343 + 80$

11. $21 - 74$

12. $36 - 63$

13. $(-5)(38)(-20)$

14. $2 \cdot 83 \cdot (-5)$

15. $4 \cdot (25 \cdot 27)$

Find each product.

16. $25(-99)$ _____

17. $19(-6)$ _____

18. $6 \cdot \$2.99$ _____

19. $102 \cdot \$21$ _____

20. $19 \cdot 21$ _____

21. $26 \cdot 97$ _____

22. $21 \cdot (-11)$ _____

23. $9 \cdot \$4.98$ _____

24. $103 \cdot \$32$ _____

The table to the right shows daily changes in temperature over a 5-day period.

25. Which two-day period had the greatest change in temperature?

26. On Sunday the temperature was 20°F . What was the temperature at the end of the day on Friday?

Day	Change in Temperature
Mon	-12°F
Tues	$+6^\circ\text{F}$
Wed	-4°F
Thurs	-9°F
Fri	$+8^\circ\text{F}$

Puzzle 1-5

Properties of Numbers

Find a way to set up each of the following problems so that they are easier to compute using mental math.

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|---|--------------------------------|----------------------------|----------------------------|
| 1. $76 + 52 + 24 = \underline{\hspace{2cm}}$ | A. $76 + 52 + 24$ | B. $24 + 52 + 76$ | Y. $76 + 24 + 52$ |
| 2. $5 \cdot 210 \cdot 2 = \underline{\hspace{2cm}}$ | R. $(5 \cdot 210) \cdot 2$ | O. $(5 \cdot 2) \cdot 210$ | L. $5 \cdot (210 \cdot 2)$ |
| 3. $(6 + x)4 = \underline{\hspace{2cm}}$ | R. $(6 \cdot 4) + (x \cdot 4)$ | B. $(6 + x)(2 + 2)$ | S. $(6 + x)(4 \cdot 1)$ |
| 4. $72 - 35 = \underline{\hspace{2cm}}$ | K. $72 - 32 - 3$ | T. $72 - (34 + 1)$ | A. $(70 + 2) - 35$ |
| 5. $163 + 118 + 36 = \underline{\hspace{2cm}}$ | T. $163 + 36 + 118$ | N. $163 + 118 + 36$ | I. $118 + 36 + 163$ |
| 6. $2.7 + 9.2 + 7.3 = \underline{\hspace{2cm}}$ | O. $2.7 + 7.3 + 9.2$ | E. $2.7 + 9.2 + 7.3$ | K. $7.3 + 9.2 + 2.7$ |
| 7. $51 - 87 = \underline{\hspace{2cm}}$ | T. $51 - (80 + 7)$ | L. $(25 + 26) - 87$ | W. $51 - (81 + 6)$ |
| 8. $(-5)(131)(-20) = \underline{\hspace{2cm}}$ | E. $(-5)(131)(-20)$ | Y. $(131)(-5)(-20)$ | N. $(-5)(-20)(131)$ |

Fill in your answers to find out the site of the final victory of the American Revolution.
