

Name _____

2-4B Lesson Master**Questions on SPUR Objectives**

See pages 125–127 for objectives.

SKILLS Objective B

1. Which expression is *not* equal to $-(-2x + 5)$? _____
- A $2x - 5$ B $2x + 5$ C $-5 + 2x$ D $-(-2x) - 5$
2. Describe the pattern that develops when you take a negative number to an even power and to an odd power. To find the pattern, consider $(-2)^1$, $(-2)^2$, $(-2)^3$, $(-2)^4$, $(-2)^5$, and so on.
- _____
- _____

In 3–19, simplify.

3. $-(-(-(-(-m))))$

4. $-(2p + 1)$

5. $(-t)^6$

6. $-(3z + 2)$

7. $7k^2 - (k^2 + 5)$

8. $-\left(\frac{1}{2}z - \frac{2}{3}\right)$

9. $5x - (2x + 6)$

10. $2r - \frac{1}{4}(8r + 16)$

11. $(6xy - 4) - (2xy - 1)$

12. $-(-(-(-k)^2))$

13. $\ell^3 + m - n^2 - (-2\ell^3 + 3m - n^2)$

14. $(0.5t - 1) - (0.7t - 2.1)$

15. $(100.2y + 0.1) - 0.2(0.5y - 15)$

16. $(4j + 1) - 6(j + 2)$

17. $(-5f)(-f)(2f)$

18. $(-5p)(-p^2)$

19. $\frac{2+d}{3} - \frac{2-d}{3}$

20. Write an expression for the opposite of $\frac{-3x - n}{2}$.

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PROPERTIES Objectives B and D

In 21-24, match each property with the example of the property.

(a) Multiplication Property of -1

(b) Opposite of Opposites Property

(c) Opposite of a Sum Property

(d) Opposite of a Difference Property

21. $2 + -(-1) = 2 + 1$ _____

22. $-(6 - x) = -6 + x$ _____

23. $-(2x + 3) = -2x - 3$ _____

24. $-1(k) + 6 = -k + 6$ _____

True or False In 25-30, decide whether the equation is true or false and then justify your answer.

25. $(-2)^2 = 4$ _____

26. $-2^2 = 4$ _____

27. $-(2)^2 = 4$ _____

28. $(-2)^3 = -8$ _____

29. $-2^3 = -8$ _____

30. $-(2)^3 = -8$ _____

31. Use the Opposite of Opposites Property to justify why $(-1)^{100}$ is positive and $(-1)^{101}$ is negative.

USES Objective B32. Suppose you walk up 8 steps, then turn around and go back down n steps. You stop, and then continue down the stairs for another k steps. Express your location on the stairs in two different ways.
