Math 151 Ch. 1 Sample Test Mr. Singh

1. Find the prime factorization of 42. If the number is prime, state this.
2. Evaluate $8 - |-3|$.
3. Write a true sentence using either $<$ or $>$: $\frac{5}{6} \_\_\_\_ \frac{7}{9}$.
4. Add $-6 + (-1)$.
5. Add $-19.4 + 17.8$.
6. Add $\frac{-5}{6} + \frac{3}{8}$.
7. Subtract $-22 - (-10)$.
8. Subtract $+15 - (-6) - 9 + 5$.
9. Simplify $-\frac{3}{4} - \left(-\frac{5}{8}\right)$.
10. Translate from mathematical language and simplify:

    Subtract -3 from -16.
11. Multiply $-3 \cdot (-5) \cdot (-5) \cdot 6 \cdot (-2)$.
12. Multiply $-9 \cdot (-5) \cdot (-9)$.
13. Multiply $-\frac{22}{3} \cdot (-6)$.
14. Write the expression $-(-5x + 4y - 3z)$ without parentheses.
15. Evaluate $5x^2 + 9x$ when $x = 4$.
16. Evaluate $8 - 10x$ when $x = -2$.
17. Simplify $(-7 - 5)\,[3 + (6 + 4)]$.
18. Simplify $3 + 5\,[-2 + 7(5 + 8)]$.
19. Simplify $12 + (-11) - (-20) - 11 + 5$.
20. Simplify $3\left(2 + 3^2\right) - 5^2$.
21. Simplify $6(-2) - 5(-3) - 2$.
22. Write $7y \cdot 7y \cdot 7y \cdot 7y$ using exponents.
23. Find $-(-x)$ when $x = -5$.
24. Simplify $9x - (3x - 8) - (-7x + 1)$.
25. Simplify $3x - [9 - 6(2x - 5)]$.