

Simplify the following by removing the parentheses, brackets, and braces as necessary:
(3 pts. each)

1) $-(8a)=$

2) $-(x + z)=$

3) $-(-9a + 7b - 24)=$

4) $-(n + 11)=$

5) $[1(-2x + 3y) - 6]=$

6) $-\{7 - [9 - (7 + 8)]\}=$

7) $3(4x + 5) - [(12x + 10) + 5]=$

8) $[5(x + 2) - 3x]=$

9) $-[4\{4[3(y - 2) - 4(y + 2)] - 3\}]=$

10) $[5(x + 2) - 3x] - \{4[3(y - 2) - 4(y + 2)] - 3\}=$

Fill in the blanks:

(3 pts. per question)

- 11) 62.4 is _____% of 156.
- 12) 108 is _____% of 800.
- 13) 74 is to 111, as, 17 is to _____.
- 14) 535.5 is to 714, as, 150 is to _____.
- 15) 1 inch is equal to _____ feet, which is the decimal equivalent of 1 inch.

Word problem : (5 pts.)

- 16) A blueprint of a shopping mall is in the scale of $1" = 60'$. One part of the mall is to be 220 feet long. How long will this be on the blueprint in inches?

Perform each of the indicated operations:
(5 pts. each)

17) $\left(\frac{2}{3}\right)\left(\frac{3}{8}\right) =$

18) $\left(\frac{7}{10}\right) + \left(\frac{13}{-5}\right) =$

19) $t^4 \cdot t^3 \cdot t^3 =$

20) $r^6 \div r^{13} =$

21) $(-x^6)^2 =$

22) $(y^3)\left(\frac{1}{y^3}\right) =$

23) $2x[4 + 3(-x - y)] =$

24) $4(4x + 3) + \{-2[2(3x + 3)] + 4\} =$