

Each problem is worth 5 points. For full credit indicate clearly how you reached your answer.

1. Simplify the expression $(x^2y^3z)^3$ and write your answer with only positive exponents.

$$x^6y^{-9}z^3$$

$$\left(\frac{x^6z^3}{y^9} \right)$$

Nice
Job!

First I distributed the exponent three and since y^{-9} is negative and is equal to $\frac{1}{y^9}$, I put it on the bottom.

2. Solve the equation $\frac{3(n-2)}{5} + \frac{2n+3}{6} = \frac{4n+1}{9} + 2$

$$18 \left(\frac{3n-6}{5} \right) + 18 \left(\frac{2n+3}{6} \right) = 18 \left(\frac{4n+1}{9} \right) + (2)90$$

$$54n - 108 + 30n + 45 = 40n + 18 + 180$$

$$84n - 63 = 40n + 198$$

$$44n = 253$$

$$n = n = \frac{253}{44}$$

$$n = \frac{23}{4} \text{ or } 5\frac{3}{4}$$

Nice

First I simplified the $3(n-2)$ which equaled $3n-6$. Then I found a common denominator of 90. I cancelled 90 with the denominator cause I wanted to get rid of all denominators. Then I got $54n - 108 + 30n + 45 = 40n + 18 + 180$. After that I began to solve the equation and got $44n = 253$. Then divided 253 by 44 and got $\frac{253}{44}$. Then they both can be reduced by 11 to give me my answer of $n = \frac{23}{4}$.