Math 9 – Flashback #2

1. Simplify: $2^7 \cdot (2^4)^3$

   a) In the answer, what is the base and what is the exponent?

2. Simplify: $1\frac{3}{4} \cdot \frac{8}{9} \cdot (-3)$

   a) Show the answer on a numberline accurately.

3. Simplify: $6(3x - 2) - (4x + 9) + (3x^2 - 2x)$

   a) Model the final answer using algebra tiles
   b) In the final answer, list the coefficients and identify the constant
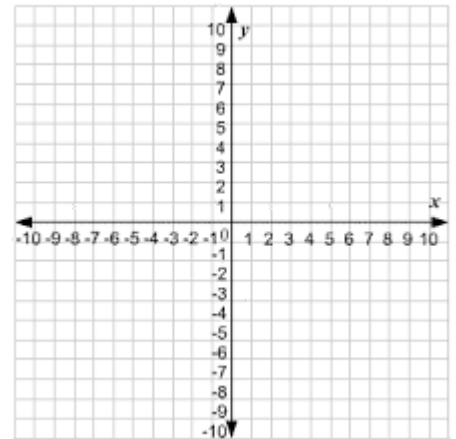   c) What is the degree of the expression?

4. Determine the <u>**total surface area**</u> of a rectangular prism with dimensions of 12cm, 8 cm and
   3 cm, with a 1 cm cube attached to its top side.

5. Fill in a t-chart given the equation $y = -3x + 2$. (be sure to have a minimum of 5 points)

   a) Show the filled in table of values
   b) Graph these points on a grid

6. Simplify: $\dfrac{10-4^2+(16\div(-8))-1}{-10-8(-3)}$ (no calculator – show all steps)

7. Solve: $\frac{2}{3}(x - 9) = \frac{1}{4} - x$

   a) Check your solution

8. A triangle with side lengths of 3cm, 4,8 cm and 5.1 cm is enlarged by 250%. What are the lengths of the sides in the image?