1. (1 point each) Evaluate the following:

(a) $4^3$

(b) $7^0$

(c) $5!$

(d) $\begin{align*}
4 \text{ ft} 8 \text{ in} \\
+ \quad 12 \text{ ft} 6 \text{ in}
\end{align*}$

(e) $\begin{align*}
5.766 \times 10^2 \\
+ \quad 4.56 \times 10^3
\end{align*}$

2. (4 points) How many different ways are there to arrange the four letters A, B, C, and D? (Each letter appears exactly once in each ‘word’.)

Answer Box:
3. (4 points) How many different numbers can be written using three digits, each of which may be chosen from 0 through 9? How many if they may be chosen from 0 and 1?

**Answer Box:**

- 0–9
- 0 and 1

4. (1 point each) Given the set of steps:

1. Put a log on the fire
2. Wait 5 minutes.
3. If the temperature is still below 75, repeat steps 1-3.
4. Lie back and relax

At which temperatures would step 4 be reached? *(Circle all that apply)*

(a) 74
(b) 72
(c) 75
(d) 78

5. (3 points) Given the equation: 

\[ x^2 - 7x + 12 = 0 \]

What is the value of \( x \)?

**Answer Box:**