THE INVENTOR'S ESCAPE ROOM LOCKS

Lock A: Evaluate the following expressions. Show all work.

1. $8 \times 15 \div 5 - (5 + 9)$
2. $(10 + 2 - 2) \times 6 - 1$
3. $6(\frac{28}{7} + 14 \div 7) + 8$
4. $(6 + 8) + 9 \cdot 7$
5. $6(2 + 3) - 3(8 - 2)$

Lock A Answer:

Lock B: Given each expression, choose the step that should be performed first.

1. $4 + 2(3 \cdot 4) + 1$
   a. $4 + 2$
   b. $2 \cdot 3$
   c. $3 \cdot 4$
   d. $4 + 1$

2. $\frac{81}{27}(8 - 5)$
   a. $\frac{81}{27}$
   b. $8 - 5$
   c. 81×8
   d. 27×8

3. $10 + 6 \div 2 + 4$
   a. $10 + 6$
   b. $6 \div 2$
   c. $2 + 4$
   d. $10 + 4$

4. $12 + 3 \times 5 - 7$
   a. $12 - 7$
   b. $12 + 3$
   c. $5 - 7$
   d. 3×5

Lock B Answer:

Lock C: Evaluate the following expressions. Show all work.

1. $5 + 2 \cdot 7 - 6(-3)$
2. $(-9) \cdot 4 + 3^2 - 12$
3. $(-5)^2 \cdot 4 - 20 \div 10$
4. $3(2 + (-7) \cdot 4) +$

Lock C Answer:

Lock D: Choose all of the expressions below that are equal to 24.

a. $\frac{3^3+9\cdot 5}{1+2}$
b. $(3^3 + 9) \cdot 5 \div 1 + 2$
c. $6 - (3 \times 2) \times 4$
d. $(6 - 3) \times 2 \times 4$
e. $16 + 4 + 20 \div 5$
f. $16 + 4 + (20 \div 5)$
g. $16 + (4 + 20) \div 5$

Lock D Answer:

Lock E: Evaluate the following expression. Show all work.

$$\mathbf{2 + 7 \cdot 8 - (3^2 + 6) - (-4)^3 - (2)^5 + \frac{30}{5}}$$

Lock E Answer:

Final Code: