Roman Numerals

Insert the missing Roman numerals:

I, II, III, IV, V, VI, VII, VIII, IX, X

Someone made a mistake when writing these Roman numerals. Can you rewrite them correctly?

1. VIII = X
2. III = V
3. VV = X

Some addition and subtraction problems are easy with Roman numerals. For example,

1. V + I = VI
2. V + III = VIII
3. III - I = II
4. VII - I = VI
Other addition and subtraction problems are more complicated:

1. III + II = V
2. VI - IV = II
3. V + IV = IX
4. VI - II = IV
5. V + V = X
6. X - VI = IV
7. IV + IV = VIII
Move a stick!

These Roman numerals are made out of sticks. Someone solved all the addition problems, but made many mistakes! Can you move one stick in each equation to make them right? Share your answer with the person sitting next to you. There may be more than one way to correct the problems!

1. II + II = VI $\implies$ II + II = IV

2. VI + II = VI $\implies$ IV + II = VI

3. IV + IV = X $\implies$ V + IV = IV

4. XI + IV = XIII $\implies$ IX + IV = XIII
Insert missing Roman numerals:

X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX

Someone made a mistake when writing these Roman numerals. Can you rewrite them correctly?

1. XVIII = XX
2. XIX = XV
3. XIX = XX

Solve these addition and subtraction problems:

1. XV + II = XVII
2. XX - I = XIX
3. XVI - II = XIV
4. IX + VI = XV
5. XVII - V = XII
Move a stick to correct these problems:

1. $XIX - IX = VIII \quad \Rightarrow \quad XIX - XI = VIII$

2. $XI + IV = XIII \quad \Rightarrow \quad IX + IV = XIII$

3. $IV + VI = XII \quad \Rightarrow \quad VI + VI = XII$

4. $XX - IV = XIV \quad \Rightarrow \quad XX - IV = XVI$

5. $XIX - VI = XV \quad \Rightarrow \quad XIX - VI = XV$
More Roman numerals:

Figure out what the Roman Numerals XX and XXX stand for if

\[ X + X = XX, \quad X + X + X = XXX. \]

\[ XX = \text{twenty} \]
\[ XXX = \text{thirty} \]

Here are more Roman Numerals:

- Fifty = L
- One Hundred = C
- Five Hundred = D
- One Thousand = M

Figure out what the Roman numerals below mean:

1. DL = 550
2. CCXIV = 214
3. DVIII = 508
4. MMCC = 2200
Advanced Roman Numerals

Now that you’re an expert in writing in Roman numerals, let’s try writing bigger numbers. Write the following decimal numbers as Roman numerals.

1. 630
   DCXXX

2. 830
   DCCCXXX

3. 1000
   M

4. 1516
   MDXVI

5. 3556
   MMMDLVI

6. 1210
   MCCX
7. 5763

\[ \text{VDCCCLXIII} \]

8. 2222

\[ \text{MMCCXXII} \]

9. Write today’s date in Roman numerals.

\[ \text{IV/XVII/MMXVI} \]

Great! Let’s now convert the following Roman numerals into numbers.

1. CMIII =

\[ 903 \]

2. CCXXXVI =

\[ 236 \]

3. CLXXVII =

\[ 177 \]

4. MMIX =

\[ 2009 \]
5. MDCCXIII =
   1713

6. MCCCXXIX =
   1329

7. MMDCCCLIX =
   2859

8. MMMCCCLXXXII =
   3382

9. MMMCCXLV = 3245

Move a stick to correct the following problems.

1. XIV - V = IX
   NO ERROR

2. XXXII - IV = XXVI
   XXXI-IV=XXVII
3. LI - XVIII = XXXV
   LII-XVII=XXXV

4. CLI-XXVII = CXXII
   CL-XXVII=CXXIII

5. LX - XXXIII = XXVII
   NO ERROR