

## LXXVI.

1.  $8\frac{1}{2}$ ,  $8\frac{1}{7}$ .      2.  $2\frac{1}{2}$ , 3, 4, 6.      3. 8, 2.

## LXXVII.

1. 8, -7, -2, -12.  
 2. -25, -14,  $ab-1$ .  
 3.  $5a+6b=0$ .  
 4.  $a^2-b^2=0$ .

## LXXVIII.

1. 0, 6, 18.      2. 92, -168.      3.  $c-b:a-c:b-a$ .  
 4. 10:7:1.  
 5. Combine with identity  $(b-c)a+(c-a)b+(a-b)c=0$ .  
 6. 2, 18.      7. 5, 5.

$$10. \begin{vmatrix} a, b, -c \\ a', b', -c' \\ a'', b'', -c'' \end{vmatrix} = 0.$$

11. Assume each given quantity =  $x$ , and then eliminate  $x, y, z$  from the three equations.

$$\text{Result. } \begin{vmatrix} a, b, -1 \\ a', b', -1 \\ a'', b'', -1 \end{vmatrix} = 0.$$

12.  $ab'c + a'bc' = 0$ .

## LXXIX.

1. -15, 8100, -972.  
 2. -8:4:7:1.  
 3. 4, 3, 2.  
 4. 1, 2, 3.