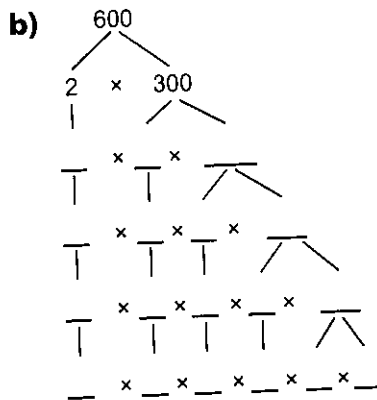
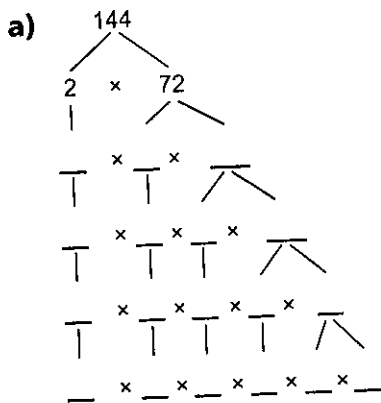


Practice

1. Complete each factor tree.

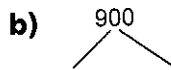
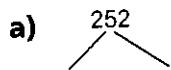


2. Use each factor tree in question 1 to write the prime factorization of:

a) $144 = \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}},$ or $\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}$

b) $600 = \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}},$ or $\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}}$

3. For each number, draw a factor tree, then write the prime factorization.



The prime factorization of 252 is: _____, or _____

The prime factorization of 900 is:
_____, or _____

4. Find the GCF of each pair of numbers.

a) 44 and 70

List the factors of 44 and the factors of 70.

$$44 \div 1 = \underline{\hspace{2cm}}$$

$$70 \div 1 = \underline{\hspace{2cm}}$$

$$44 \div \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$70 \div \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$44 \div \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$70 \div \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$70 \div \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

Factors of 44:

Factors of 70:

The GCF of 44 and 70 is .

b) 36 and 48

Factors of 36:

Factors of 48:

The GCF of 36 and 48 is .

5. a) List the first 10 multiples of each number.

Multiples of 7: 7,

Multiples of 10: 10,

b) The LCM of 7 and 10 is .

6. Find the LCM of each pair of numbers.

a) 12 and 30

Multiples of 12: 12, 24,

Multiples of 30: 30,

The LCM of 12 and 30 is .

b) 16 and 18

Multiples of 16:

Multiples of 18:

The LCM of 16 and 18 is .

7. Hamburger patties come in packages of 8. Buns come in packages of 6.

What is the least number of hamburgers that can be made with no patties or buns left over?

The total number of patties are multiples of 8: , , , , , ...

The total number of buns are multiples of 6: , , , , , ...

For there to be no patties or buns left over, the numbers of patties and buns must be the same.

Find the of 6 and 8:

The least number of hamburgers is .