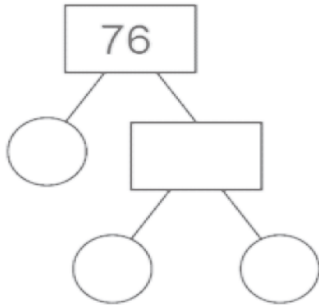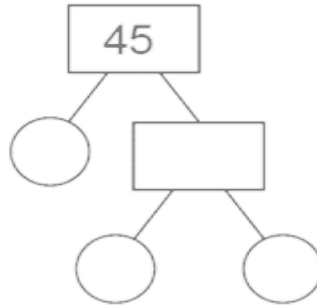# 3 Factors and Multiples

Find the Prime Factors of the Numbers

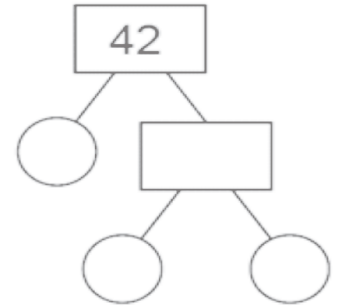1)   76

Prime Factors
_ x _ x _ = 76

2)   45

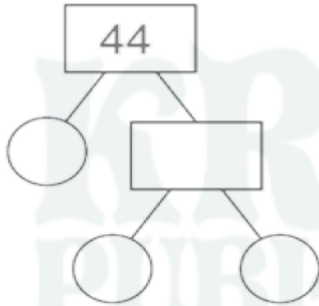Prime Factors
_ x _ x _ = 45

3)   42

Prime Factors
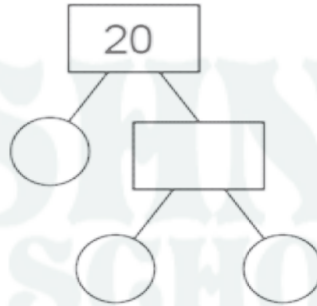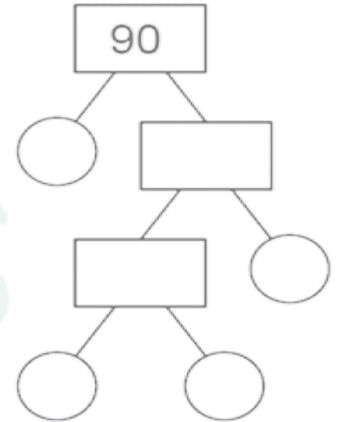_ x _ x _ = 42

4)   44

Prime Factors
_ x _ x _ = 44

5)   20

Prime Factors
_ x _ x _ = 20

6)   90

Prime Factors
_ x _ x _ x _ = 90

Name _____   Date _____

Fill in the missing numbers in the factor trees then write the prime factorization (the first one is done for you):

6	1 , 2 , 3 , 6
9	1 , 3 , 9
Common Factors	1 , 3
Greatest Common Factor	3

8	___/___/___/___
20	___/___/___/___/___/___
Common Factors	___/___/___
Greatest Common Factor	___

16	___/___/___/___/___
24	___/___/___/___/___/___/___/___
Common Factors	___/___/___/___
Greatest Common Factor	___

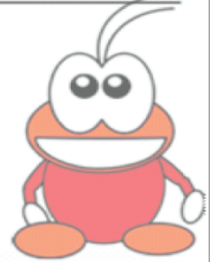|	
12	___/___/___/___/___/___/
30	___/___/___/___/___/___/___
Common Factors	___/___/___/___
Greatest Common Factor	___

Name _____   **Date** _____

Find the lowest common multiple of the following numbers:

(1) LCM of 3 and 4_____   (5) LCMof 10 and 4_____

(2) LCM of 2 and 5 _____   (6) LCM of 3 and 9_____

(3) LCM of 2and 6 _____   (7) LCM of 5 and 6_____

(4) LCM of 3 and 5_____   8) LCm of 2 and 7_____

(9) LCM of 8 and 6_____   (13) LCM of 8 and 10_____

(10) LCM of 3 and 7_____   (14) LCM of 3 and 2_____

(11) LCM of 6 and 7_____   (15) LCM of 4 and 5_____

(12) LCM of 4 and 9_____   (16) LCM of 8 and 10_____

(17) LCM of 9 and 6_____   (22) LCM of 10 and 5_____

(18) LCM of 2 and 9_____   (23) LCM of 5 and 9_____

(19) LCM of 3 and 8_____   (24) LCMof 8 and 12_____

(21) LCM of 5 and 7_____   (25) LCM of 10 and 2_____

Name _____   **Date** _____
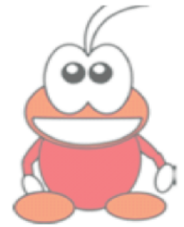
Find the highest common factor of the following numbers:

(1) HCF of 12, 10 and 15 _____

(2) HCF of 10, 6 and 8 _____

(3) HCF of 20, 15 and 10 _____

(4) HCF of 24, 12 and 6 _____

(5) HCF of 16, 20 and 24 _____

(6) HCF of 12, 15 and 18 _____

(7) HCF of 50, 25 and 15 _____

(8) HCF of 10, 20 and 40 _____

(9) HCF of 12,18 and 30 _____

(10) HCF of 16,12 and 24 _____

(11) HCF of 30, 15 and 75 _____

(12) HCF of 25,50 and 75 _____

(13) HCF of 8, 24 and 48 _____

(14) HCF of 5, 15 and 38 _____

(15) HCF of 12, 36 and 50 _____

(16) HCF of 8, 44 and 100 _____

(17) HCF of 7, 14 and 16 _____

(18) HCF of 10, 20 and 24 _____

(19) HCF of 42,14 and 21 _____

(21) HCF of 18,27 and 15 _____

(22) HCF of 10,20 and 30 _____

(23) HCF of 12,24 and 32 _____

(24) HCF of 32, 48 and 12 _____

(25) HCF of 13,14 and 15 _____

Name _____   **Date** _____
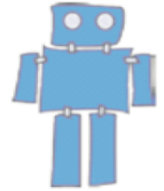
Find the lowest common multiples of the following numbers:

(1) LCM of 8, 10 and 12_____

(2) LCM of 10, 6 and 8 _____

(3) LCM of 20, 15 and 10_____

(4) LCM of 24, 12 and 6_____

(5) LCM of 4, 12 and 22_____

(6) LCM of 12, 15 and 18_____

(7) LCM of 50, 25 and 15_____

(8) LCM of 15, 20 and 40_____

(9) LCM of 12,18 and 30_____

(10) LCM of 16,12 and 24_____

(11) LCM of 30,15 and 75_____

(12) LCM of 25,50 and 75_____

(13) LCM of 8, 24 and 40_____

(14) LCM of 5, 15 and 35_____

(15) LCM of 12, 36 and 50_____

(16) LCM of 8, 16 and 100_____

(17) LCM of 7, 14 and 20_____

(18) LCM of 10, 20 and 24_____

(19) LCM of 42,14 and 21_____

(21) LCM of 18,27 and 15_____

(22) LCM of 10,20 and 30_____

(23) LCM of 12,24 and 32_____

(24) LCM of 32, 48 and 12_____

(25) HCF of 12,14 and 16_____

Name _____   **Date _____**

Find the highest common factor of the following numbers:

(1) HCF of 12 and 15_____

(2) HCF of 10 and 8 _____

(3) HCF of 20 and 15_____

(4) HCF of 25 and 10_____

(5) HCF of 16 and 24_____

(6) HCF of 12 and 18_____

(7) HCF of 50 and 15_____

8) HCF of 20 and 40_____

(9) HCF of 18 and 30_____

(10) HCF of 12 and 24_____

(11) HCF of 15 and 75_____

(12) HCF of 25 and 50_____

(13) HCF of 8 and 24_____

(14) HCF of 5 and 50_____

(15) HCF of 12 and 50_____

(16) HCF of 8 and 100_____

(17) HCF of 14 and 16_____

(18) HCF of 20 and 24_____

(19) HCF of 12 and 21_____

(21) HCF of 27 and 15_____

(22) HCF of 10 and 30_____

(23) HCF of 24 and 32_____

(24) HCF of 48 and 12_____

(25) HCF of 13 and 15_____

Name _____ Date _____

Prime factorize of the following numbers.

165 = _____

220 = _____

278 = _____   435 = _____

155 = _____   750 = _____

360 = _____   555 = _____

195 = _____   440 = _____

300 = _____   375 = _____

400 = _____   625 = _____

654 = _____   410 = _____

194 = _____   550 = _____

Name _____   Date _____

15

Find the factors for each number

Number	Factors
12	
24	
15	
60	
35	
44	
17	
50	
100	
25	
64	
16	
30	
32	
40	

Name _____   Date _____