Factors and Multiples

Practice worksheet · KS3

Name: _____ Date: _____

1. List all the factors of 12

2. List all the factors of 20

3. List all the factors of 30

4. List all the factors of 45

5. Write the first 4 multiples of 5

6. Write the first 4 multiples of 9

7. Write the first 5 multiples of 12

8. Is 3 a factor or a multiple of 15?

9. Is 24 a factor or a multiple of 8?

10. List all the factors of 16

11. A number's factors are 1, 2, 3, 4, 6 and 12. What is the number?

12. Which one of these is a multiple of 6: 16, 26, 36 ?

13. List all the factors of 49

★ stretch

14. A teacher puts 36 chairs into equal rows. List every number of rows that works.

★ stretch

15. List all the factors of 100

★ stretch

Answers

Factors and multiples

1. 1 x 12, 2 x 6, 3 x 4 = 1, 2, 3, 4, 6, 12

2. 1 x 20, 2 x 10, 4 x 5 = 1, 2, 4, 5, 10, 20

3. 1 x 30, 2 x 15, 3 x 10, 5 x 6 = 1, 2, 3, 5, 6, 10, 15, 30

4. 1 x 45, 3 x 15, 5 x 9 = 1, 3, 5, 9, 15, 45

5. start at 5, add 5 each time = 5, 10, 15, 20

6. start at 9, add 9 each time = 9, 18, 27, 36

7. start at 12, add 12 each time = 12, 24, 36, 48, 60

8. 3 fits into 15 exactly (3 x 5 = 15) = a factor

9. 8 fits into 24 exactly, so 24 is what you reach counting up in 8s = a multiple

10. 1 x 16, 2 x 8, 4 x 4 = 1, 2, 4, 8, 16

11. the largest factor of a number is always the number itself = 12

12. 6 x 6 = 36; counting up in 6s never lands on 16 or 26 = 36

13. 1 x 49, 7 x 7 = 1, 7, 49

14. each way is a factor pair of 36, stopping at 6 x 6 = 1, 2, 3, 4, 6, 9, 12, 18, 36

15. 1 x 100, 2 x 50, 4 x 25, 5 x 20, 10 x 10 = 1, 2, 4, 5, 10, 20, 25, 50, 100