QUICK COVER   Multiples and Factors

Task 1 : Identifying the factors of a number

Task 2 : Identifying multiples of a number

Task 3 : Finding the highest common factor of 2 numbers

Task 4 : Finding the lowest common multiple of 2 numbers

Help and Hints........

TASK 1

List the factors of 36

Find the numbers that 'multiply' to make 36

1 x 36 = 36

2 x 18 = 36   So the factors are

3 x 12 = 36   1, 2, 3, 4, 6, 9, 12 18 and 36

4 x 9 = 36

6 x 6 = 36

TASK 2

What is the 7th multiple of 6?

7 x 6 = 42

What is the 10th multiple of 16?

10 x 16 = 160

TASK3

Find the highest common factor of 30 and 45

The factors of 30 are

   1, 2, 3, 5, 6, 10, ⑮ and 30

The factors of 45 are

   1, 3, 5, 9, ⑮ and 45

The 'highest' number in both lists is 15

15 is the highest common factor of 30 and 45

TASK 4

Find the lowest common multiple of 18 and 30

The first few multiples of 30 are

   20, 60, ⑨⓪ 120, 150

The first few multiples of 18 are

   18, 36, 54, 72, ⑨⓪

90 is the smallest number in both lists

90 is the lowest common multiple of 18 and 30

Multiples and Factors

TASK 1	TASK 2	TASK 3	TASK 4
1. List the factors of 30	1. What is the 8th multiple of 4?	1. Find the highest common factor of 30 and 65	1. Find the lowest common multiple of 14 and 10
2. List the factors of 48	2. What is the 11th multiple of 6?	2. Find the highest common factor of 12 and 66	2. Find the lowest common multiple of 56 and 40
3. List the factors of 12	3. What is the 13th multiple of 5?	3. Find the highest common factor of 27 and 135	3. Find the lowest common multiple of 54 and 36
4. List the factors of 18	4. What is the 9th multiple of 8?	4. Find the highest common factor of 135 and 195	4. Find the lowest common multiple of 10 and 20
5. List the factors of 54	5. What is the 12th multiple of 9?	5. Find the highest common factor of 63 and 35	5. Find the lowest common multiple of 20 and 24
6. List the factors of 81	6. What is the 11th multiple of 12?	6. Find the highest common factor of 48 and 144	6. Find the lowest common multiple of 56 and 35
7. List the factors of 64	7. What is the 6th multiple of 11?	7. Find the highest common factor of 21 and 49	7. Find the lowest common multiple of 16 and 12
8. List the factors of 75	8. What is the 16th multiple of 2?	8. Find the highest common factor of 28 and 36	8. Find the lowest common multiple of 35 and 28
9. List the factors of 72	9. What is the 4th multiple of 15?	9. Find the highest common factor of 55 and 143	9. Find the lowest common multiple of 8 and 12
10. List the factors of 63	10. What is the 12th multiple of 7?	10. Find the highest common factor of 63 and 56	10. Find the lowest common multiple of 4 and 8
11. List the factors of 32	11. What is the 7th multiple of 9?	11. Find the highest common factor of 110 and 121	11. Find the lowest common multiple of 54 and 27
12. List the factors of 56	12. What is the 12th multiple of 8?	12. Find the highest common factor of 42 and 21	12. Find the lowest common multiple of 35 and 20
13. List the factors of 90	13. What is the 9th multiple of 4?	13. Find the highest common factor of 64 and 88	13. Find the lowest common multiple of 35 and 42
14. List the factors of 100	14. What is the 15th multiple of 6?	14. Find the highest common factor of 40 and 60	14. Find the lowest common multiple of 9 and 15
15. List the factors of 144	15. What is the 20th multiple of 20?	15. Find the highest common factor of 25 and 60	15. Find the lowest common multiple of 32 and 24

Multiples and Factors

ANSWERS

TASK 1	TASK 2	TASK 3	TASK 4
1.	1.	1.	1.
2.	2.	2.	2.
3.	3.	3.	3.
4.	4.	4.	4.
5.	5.	5.	5.
6.	6.	6.	6.
7.	7.	7.	7.
8.	8.	8.	8.
9.	9.	9.	9.
10.	10.	10.	10.
11.	11.	11.	11.
12.	12.	12.	12.
13.	13.	13.	13.
14.	14.	14.	14.
15.	15.	15.	15.