

**FACTORS AND MULTIPLES – PRACTICE QUESTIONS  
NON-CALCULATOR**



metatutor

1.

Write down all the factors of 20.

1, 20, 2, 10, 4, 5

2.

Write down all the factors of 24.

1, 24, 2, 12, 3, 8, 4, 6

3.

Write down all the factors of 27.

1, 27, 3, 9

4.

Write down all the factors of 40.

1, 40, 2, 20, 4, 10, 5, 8

5.

Write down all the factors of 45.

1, 45, 3, 15, 5, 9

6.

Write down the first five multiples of 12.

12, 24, 36, 48, 60

7.

Write down the first five multiples of 20.

20, 40, 60, 80, 100

8.

Write down the first five multiples of 15.

15, 30, 45, 60, 75

9.

Write down all the multiples of 22 that are less than 100.

22, 44, 66, 88

10.

Write down all the multiples of 13 between 50 and 80.

52, 65, 78

11.

Write down all the multiples of 16 between 50 and 100.

64, 80, 96

12.

Write down all the multiples of 18 that are less than 150.

18, 36, 54, 72, 90, 108, 126, 144

13.

Find the highest common factor of 18 and 30.

$$18: 1, 18, 2, 9, 3, 6$$

$$30: 1, 30, 2, 15, 3, 10, 5, 6$$

6

14.

Find the highest common factor of 16 and 24.

$$16: 1, 16, 2, 8, 4$$

$$24: 1, 24, 2, 12, 3, 8, 4, 6$$

8

15.

Find the highest common factor of 21 and 35.

$$21: 1, 21, 3, 7$$

$$35: 1, 35, 5, 7$$

7

16.

Find the highest common factor of 32 and 48.

$$32: 1, 32, 2, 16, 4, 8$$

$$48: 1, 48, 2, 24, 3, 16, 4, 12, 6, 8$$

16

17.

Find the highest common factor of 36 and 60.

$$36: 1, 36, 2, 18, 3, 12, 4, 9, 6$$

$$60: 1, 60, 2, 30, 3, 20, 4, 15, 5, 12, 6, 10$$

12

18.

Find the lowest common multiple of 6 and 8.

6: 6, 12, 18, 24

8: 8, 16, 24

24

19.

Find the lowest common multiple of 12 and 15.

12: 12, 24, 36, 48, 60

15: 15, 30, 45, 60

60

20.

Find the lowest common multiple of 16 and 20.

16: 16, 32, 48, 64, 80

20: 20, 40, 60, 80

80

21.

Find the lowest common multiple of 8 and 14.

8: 8, 16, 24, 32, 40, 48, 56

14: 14, 28, 42, 56

56

22.

Find the lowest common multiple of 15 and 25.

15: 15, 30, 45, 60, 75

25: 25, 50, 75

75

23.

Find the highest common factor of 45 and 75.

45: 1, 45, 3, 15, 5, 9

75: 1, 75, 3, 25, 5, 15

15

24.

Find the lowest common multiple of 18 and 24.

18: 18, 36, 54, 72

24: 24, 48, 72

72

25.

Find the lowest common multiple of 12 and 22.

12: 12, 24, 36, 48, 60, 72, 84, 96, 108, 120, 132

22: 22, 44, 66, 88, 110, 132

132

26.

Find the highest common factor of 28 and 84.

28: 1, 28, 2, 14, 4, 7

84: 1, 84, 2, 42, 3, 28, 4, 21, 6, 14, 7, 12

28

27.

Find the lowest common multiple of 21 and 35.

21: 21, 42, 63, 84, 105

35: 35, 70, 105

105

28.

Write down all the factors of 40 that are not factors of 20.

40: 1, 40, 2, 20, 4, 10, 5, 8

20: 1, 20, 2, 10, 4, 5

40, 8

29.

Write down all the multiples of 30 between 100 and 200.

120, 150, 180

30.

Adrian is thinking of a number.

The number is a factor of 90 and a multiple of 9.

Write down all the numbers that Adrian could be thinking of.

F of 90: 1, 90, 2, 45, 3, 30, 5, 18, 6, 15, 9, 10

M of 9: 9, 18, 27, 36, 45, 54, 63, 72, 81, 90, ...

90, 45, 18, 9

31.

Write down three different multiples of 14 that add to 98.

14: 14, 28, 42, 56, 70, 84, 98

$$14 + 28 + 56 = 98$$

14, 28, 56

32.

Write down all the factors of 42 that are not factors of 24.

42: 1, 42, 2, 21, 3, 14, 6, 7

24: 1, 24, 2, 12, 3, 8, 4, 6

42, 21, 14, 7

33.

Write down three different factors of 54 that add to 37.

54: 1, 54, 2, 27, 3, 18, 6, 9

$$27 + 9 + 1 = 37$$

27, 9, 1

34.

Betty writes down two different factors of 64 and a multiple of 11.  
The three numbers add together to make 34.

Write down the three numbers.

F of 64: 1, 64, 2, 32, 4, 16, 8

M of 11: 11, 22, 33, 44, 55, 66, 77, ...

$$4 + 8 + 22 = 34$$

4, 8, 22

35.

Charmaine thinks of an odd number.

Charmaine's number is a factor of 120 and a multiple of 5.

Write down all the numbers that Charmaine could be thinking of.

F of 120: 1, 120, 2, 60, 3, 40, 4, 30, 5, 24, 6, 20, 8, 15, 10, 12

M of 5: 5, 10, 15, 20, ...

5, 15

36.

Find the highest common factor of 18, 36 and 63.

18: 1, 18, 2, 9, 3, 6

36: 1, 36, 2, 18, 3, 12, 4, 9, 6

63: 1, 63, 3, 21, 7, 9

9

37.

Find the lowest common multiple of 12, 15 and 20.

12: 12, 24, 36, 48, 60, ...

15: 15, 30, 45, 60

20: 20, 40, 60

60

38.

Find the lowest common multiple of 8, 30 and 40.

30: 30, 60, 90, 120

40: 40, 80, 120

$$120 \div 8 = 15$$

120

39.

Find the highest common factor of 32, 48 and 80.

32: 1, 32, 2, 16, 4, 8

48: 1, 48, 2, 24, 3, 16, 4, 12, 6, 8

80: 1, 80, 2, 40, 4, 20, 5, 16, 8, 10

16