

MULTIPLE CHOICE

What are the prime factors of 30?

2, 3, 5

1, 2, 3, 5

3, 10

2, 15

MULTIPLE CHOICE

Which number has prime factors 2, 3, and 7?

21

42

14

63

MULTIPLE CHOICE

How many distinct prime factors does 60 have?

2

3

4

5

MULTIPLE CHOICE

What is the prime factorization of 100?

$$2 \times 5 \times 10$$

$$2^2 \times 5$$

$$4 \times 25$$

$$2^3 \times 5^2$$

MULTIPLE CHOICE

Which is the smallest prime factor of 91?

1

7

13

91

MULTIPLE CHOICE

What is the largest prime factor of 110?

2

5

10

11

MULTIPLE CHOICE

Which expression shows 48 as a product of prime factors?

$$3 \times 16$$

$$2^3 \times 6$$

$$2^4 \times 3$$

$$4^2 \times 3$$

MULTIPLE CHOICE

What is the sum of all prime factors of 28?

2

7

9

14

MULTIPLE CHOICE

How many prime factors (with multiplicity) does 18 have?

2

3

4

5

MULTIPLE CHOICE

Which number is NOT divisible by its smallest prime factor?

15

21

25

27

MULTIPLE CHOICE

What is the prime factorization of 72?

$$8 \times 9$$

$$2^3 \times 3$$

$$2^2 \times 3^2$$

$$2^3 \times 3^2$$

MULTIPLE CHOICE

Which pair shares the same prime factors?

12 and 18

15 and 25

20 and 30

8 and 27

MULTIPLE CHOICE

What is the product of the prime factors of 45?

$$3 \times 5 = 15$$

$$3^2 \times 5 = 45$$

$$1 \times 45 = 45$$

$$5 \times 9 = 45$$

MULTIPLE CHOICE

If a number has prime factors 2, 3, and 5, it must be divisible by:

10

15

30

60

MULTIPLE CHOICE

What is the greatest prime factor of 210?

2

3

5

7

MULTIPLE CHOICE

Which number has exactly three distinct prime factors?

12

18

30

42

MULTIPLE CHOICE

Express 90 as a product of primes.

$$2 \times 3^2 \times 5$$

$$2^2 \times 3 \times 5$$

$$9 \times 10$$

$$2 \times 5 \times 9$$

MULTIPLE CHOICE

What is the smallest number with exactly two different prime factors?

4

6

8

10

MULTIPLE CHOICE

**The prime factors of a number are 2 and 11.
What could the number be?**

22

33

44

55

MULTIPLE CHOICE

What is the prime factorization of 1?

0

1

No prime factors

Undefined