

Name _____

Prime Factors

Choose the correct option.

1) The prime factorization of 36 is:

- | | |
|--|------------------------------------|
| i. $2 \times 2 \times 2 \times 3$ | ii. $2 \times 2 \times 3 \times 3$ |
| iii. $2 \times 2 \times 2 \times 3 \times 5$ | iv. $3 \times 3 \times 5$ |

2) The prime factorization of 60 is:

- | | |
|-------------------------------------|------------------------------------|
| i. $2 \times 2 \times 3 \times 5$ | ii. $2 \times 3 \times 3 \times 5$ |
| iii. $2 \times 3 \times 5 \times 5$ | iv. 3×5 |

3) The prime factorization of 72 is:

- | | |
|---------------------------------------|-----------------------------|
| i. $2^2 \times 2^3 \times 3 \times 5$ | ii. $2^2 \times 3 \times 5$ |
| iii. $2^3 \times 3^2$ | iv. $2 \times 3 \times 5$ |

4) The prime factorization of 120 is:

- | | |
|------------------------------|-----------------------------|
| i. $2^3 \times 3^2 \times 5$ | ii. $2^3 \times 3 \times 5$ |
| iii. $2^3 \times 5 \times 7$ | iv. $2^3 \times 3$ |

5) The prime factorization of 200 is:

- | | |
|------------------------------|----------------------|
| i. $2 \times 3 \times 5$ | ii. 2^5 |
| iii. $2 \times 3 \times 5^2$ | iv. $2^3 \times 5^2$ |

6) The prime factorization of 480 is:

- | | |
|---|---|
| i. $2 \times 2 \times 3 \times 3 \times 5$ | ii. $2 \times 2 \times 3 \times 5$ |
| iii. $2 \times 2 \times 2 \times 2 \times 3 \times 5$ | iv. $2 \times 2 \times 2 \times 3 \times 5$ |