

Prime Factorization

- 1** Use a factor tree to find the prime factorization of 18.

factor tree may vary

answer:

$$18 = 2 \times 3 \times 3$$

$$\text{or } 18 = 2 \times 3^2$$

- 2** Use a factor tree to find the prime factorization of 32.

factor tree may vary

answer:

$$32 = 2 \times 2 \times 2 \times 2 \times 2$$

$$\text{or } 32 = 2^5$$

- 3** Use a factor tree to find the prime factorization of 60.

factor tree may vary

answer:

$$60 = 2 \times 2 \times 3 \times 5$$

$$\text{or } 60 = 2^2 \times 3 \times 5$$

- 4** Use a factor tree to find the prime factorization of 91.



answer:

$$91 = 7 \times 13$$

- 5** Use a factor tree to find the prime factorization of 126.



factor tree may vary

answer:

$$126 = 2 \times 3 \times 3 \times 7$$

$$\text{or } 126 = 2 \times 3^2 \times 7$$

- 6** Use a factor tree to find the prime factorization of 315.



factor tree may vary

answer:

$$315 = 3 \times 3 \times 5 \times 7$$

$$\text{or } 315 = 3^2 \times 5 \times 7$$