

Prime Factor Decomposition *fluency*

ANSWERS



Write as a product of prime factors in index form

1 12

$$2^2 \times 3$$

2 18

$$2 \times 3^2$$

3 20

$$2^2 \times 5$$

4 28

$$2^2 \times 7$$

5 45

$$3^2 \times 5$$

6 50

$$2 \times 5^2$$



Write as a product of prime factors

7 60

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

8 72

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

9 84

$$2^2 \times 3 \times 7$$

10 90

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

11 98

$$2 \times 7^2$$

12 126

$$2 \times 3^2 \times 7$$



Write as a product of prime factors

13 120

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

14 150

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

15 196

$$2^2 \times 7^2$$

16 225

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

17 264

$$2^3 \times 3 \times 11$$

18 375

$$3 \times 5^3$$



Write as a product of prime factors

19 360

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

20 432

$$2^4 \times 3^3$$

21 500

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

22 588

$$2^2 \times 3 \times 7^2$$

23 616

$$2^3 \times 7 \times 11$$

24 945

$$3^3 \times 5 \times 7$$



Write as a product of prime factors

25 1000

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

26 1260

$$2^2 \times 3^2 \times 5 \times 7$$

27 1764

$$2^2 \times 3^2 \times 7^2$$

28 2156

$$2^2 \times 7^2 \times 11$$

29 3150

$$2 \times 3^2 \times 5^2 \times 7$$

30 4096

$$2^{12}$$