

Name ANSWER KEY Period _____ Date _____

Factorization

Find the prime factorization for each of these numbers by making a factor tree.

Check your answers with a calculator.

1. 72

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

2. 80

$$2 \times 2 \times 2 \times 2 \times 5$$

3. 250

$$2 \times 5 \times 5 \times 5$$

4. 400

$$2 \times 2 \times 2 \times 2 \times 5 \times 5$$

5. 640

$$2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 5$$

6. 100

$$2 \times 2 \times 5 \times 5$$

7. 1,225

$$5 \times 5 \times 7 \times 7$$

8. 390

$$2 \times 3 \times 5 \times 13$$

9. 405

$$3 \times 3 \times 3 \times 3 \times 5$$

10. 360

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

11. 128

$$2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$$

12. 90

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

13. 140

$$2 \times 2 \times 5 \times 7$$

14. 294

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

15. 462

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

16. 720

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

17. 264

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

18. 81

$$3 \times 3 \times 3 \times 3$$

19. 144

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

20. 1680

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