

Lesson 6 Skills Practice

Permutations

Find each value. Use a calculator if needed.

1. $P(2,2)$ $2 \times 1 = 2$

2. $P(4,3)$ $4 \times 3 \times 2 = 24$

3. $P(5,4)$ $5 \times 4 \times 3 = 60$

4. $P(9,5)$ $9 \times 8 \times 7 = 504$

5. $P(8,7)$ $8 \times 7 \times 6 = 324$

6. $P(12,13)$ $12 \times 11 \times 10 = 1,320$

7. $P(11,3)$ $11 \times 10 \times 9 = 990$

8. $P(10,4)$ $10 \times 9 \times 8 = 72$

9. $P(6,5)$ $6 \times 5 \times 4 = 120$

10. $P(5,3)$ $5 \times 4 \times 3 = 60$

11. $P(7,4)$ $7 \times 6 \times 5 = 210$

12. $P(6,4)$
 $p(12,3)$ $12 \times 11 \times 10 = 1,320$

13. How many ways can you arrange the letters in the word *prime*?

14. How many ways can you arrange 8 different crates on a shelf if they are placed from left to right?