Name: _____ Date: _____

Fresh Math

Proofs General Theorems - Medium

Lines p and q are parallel and cut by a transversal. Find the angle and name the relationship.

1. Angles 1 and 2 are corresponding angles. m angle 1 = 142°. Find m angle 2.
2. Angles 1 and 2 are alternate interior angles. m angle 1 = 83°. Find m angle 2.
3. Angles 1 and 2 are corresponding angles. m angle 1 = 98°. Find m angle 2.
4. Angles 1 and 2 are corresponding angles. m angle 1 = 125°. Find m angle 2.
5. Angles 1 and 2 are alternate exterior angles. m angle 1 = 115°. Find m angle 2.
6. Angles 1 and 2 are alternate exterior angles. m angle 1 = 126°. Find m angle 2.
7. Angles 1 and 2 are alternate exterior angles. m angle 1 = 149°. Find m angle 2.
8. Angles 1 and 2 are vertical angles. m angle 1 = 101°. Find m angle 2.
9. Angles 1 and 2 are alternate exterior angles. m angle 1 = 72°. Find m angle 2.
10. Angles 1 and 2 are same-side interior angles. m angle 1 = 93°. Find m angle 2.

Name: _____ Date: _____

Fresh Math

Proofs General Theorems - Medium

Lines p and q are parallel and cut by a transversal. Find the angle and name the relationship.

11. Angles 1 and 2 are same-side interior angles. m angle 1 = 145°. Find m angle 2.

12. Angles 1 and 2 are corresponding angles. m angle 1 = 47°. Find m angle 2.

13. Angles 1 and 2 are vertical angles. m angle 1 = 61°. Find m angle 2.

14. Angles 1 and 2 are alternate interior angles. m angle 1 = 151°. Find m angle 2.

15. Angles 1 and 2 are vertical angles. m angle 1 = 72°. Find m angle 2.

16. Angles 1 and 2 are alternate exterior angles. m angle 1 = 52°. Find m angle 2.

17. Angles 1 and 2 are alternate exterior angles. m angle 1 = 117°. Find m angle 2.

18. Angles 1 and 2 are same-side interior angles. m angle 1 = 98°. Find m angle 2.

19. Angles 1 and 2 are vertical angles. m angle 1 = 138°. Find m angle 2.

20. Angles 1 and 2 are alternate interior angles. m angle 1 = 114°. Find m angle 2.

Proofs General Theorems - Medium - Answer Key

1. Angles 1 and 2 are corresponding angles. m angle 1 = 142°. Find m angle 2.

   142°; corresponding angles are congruent

2. Angles 1 and 2 are alternate interior angles. m angle 1 = 83°. Find m angle 2.

   83°; alternate interior angles are congruent

3. Angles 1 and 2 are corresponding angles. m angle 1 = 98°. Find m angle 2.

   98°; corresponding angles are congruent

4. Angles 1 and 2 are corresponding angles. m angle 1 = 125°. Find m angle 2.

   125°; corresponding angles are congruent

5. Angles 1 and 2 are alternate exterior angles. m angle 1 = 115°. Find m angle 2.

   115°; alternate exterior angles are congruent

6. Angles 1 and 2 are alternate exterior angles. m angle 1 = 126°. Find m angle 2.

   126°; alternate exterior angles are congruent

7. Angles 1 and 2 are alternate exterior angles. m angle 1 = 149°. Find m angle 2.

   149°; alternate exterior angles are congruent

8. Angles 1 and 2 are vertical angles. m angle 1 = 101°. Find m angle 2.

   101°; vertical angles are congruent

9. Angles 1 and 2 are alternate exterior angles. m angle 1 = 72°. Find m angle 2.

   72°; alternate exterior angles are congruent

10. Angles 1 and 2 are same-side interior angles. m angle 1 = 93°. Find m angle 2.

    87°; same-side interior angles are supplementary

Proofs General Theorems - Medium - Answer Key

11. Angles 1 and 2 are same-side interior angles. m angle 1 = 145°. Find m angle 2.

    35°; same-side interior angles are supplementary

12. Angles 1 and 2 are corresponding angles. m angle 1 = 47°. Find m angle 2.

    47°; corresponding angles are congruent

13. Angles 1 and 2 are vertical angles. m angle 1 = 61°. Find m angle 2.

    61°; vertical angles are congruent

14. Angles 1 and 2 are alternate interior angles. m angle 1 = 151°. Find m angle 2.

    151°; alternate interior angles are congruent

15. Angles 1 and 2 are vertical angles. m angle 1 = 72°. Find m angle 2.

    72°; vertical angles are congruent

16. Angles 1 and 2 are alternate exterior angles. m angle 1 = 52°. Find m angle 2.

    52°; alternate exterior angles are congruent

17. Angles 1 and 2 are alternate exterior angles. m angle 1 = 117°. Find m angle 2.

    117°; alternate exterior angles are congruent

18. Angles 1 and 2 are same-side interior angles. m angle 1 = 98°. Find m angle 2.

    82°; same-side interior angles are supplementary

19. Angles 1 and 2 are vertical angles. m angle 1 = 138°. Find m angle 2.

    138°; vertical angles are congruent

20. Angles 1 and 2 are alternate interior angles. m angle 1 = 114°. Find m angle 2.

    114°; alternate interior angles are congruent