

Name: _____

Date: _____

Angle Relationships

Grades 6 – 8 • 50 questions • Show your work

1. Two angles are **complementary**. One measures 71° . Find the other angle.

 2. Two lines intersect. One angle measures 122° . What is the measure of the **vertically opposite** angle? _____
 3. Two lines intersect. One angle measures 43° . What is the measure of the **vertically opposite** angle? _____
 4. Two lines intersect. One angle measures 154° . What is the measure of the **vertically opposite** angle? _____
 5. Two angles are **supplementary**. One measures 43° . Find the other angle.

 6. Two angles are **supplementary**. One measures 65° . Find the other angle.

 7. Two angles are **complementary**. One measures 73° . Find the other angle.

 8. Two angles are **supplementary**. One measures 82° . Find the other angle.

 9. Two lines intersect. One angle measures 86° . What is the measure of the **vertically opposite** angle? _____
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10. Two lines intersect. One angle measures 26° . What is the measure of the **vertically opposite** angle? _____
11. Two angles are **complementary**. One measures 72° . Find the other angle.

12. Two lines intersect. One angle measures 105° . What is the measure of the **vertically opposite** angle? _____
13. Two angles are **complementary**. One measures 20° . Find the other angle.

14. Two angles are **complementary**. One measures 18° . Find the other angle.

15. Two angles are **supplementary**. One measures 139° . Find the other angle.

16. Two lines intersect. One angle measures 53° . What is the measure of the **vertically opposite** angle? _____
17. Two angles are **complementary**. One measures 48° . Find the other angle.

18. Two angles are **supplementary**. One measures 27° . Find the other angle.

19. Two angles are **complementary**. One measures 11° . Find the other angle.

20. Two angles are **complementary**. One measures 68° . Find the other angle.
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21. Two angles are **complementary**. One measures 35° . Find the other angle.

22. Two angles are **supplementary**. One measures 111° . Find the other angle.

23. Two angles are **supplementary**. One measures 102° . Find the other angle.

24. Two lines intersect. One angle measures 92° . What is the measure of the **vertically opposite** angle? _____
25. Two angles are **supplementary**. One measures 74° . Find the other angle.

26. Two lines intersect. One angle measures 58° . What is the measure of the **vertically opposite** angle? _____
27. Two lines intersect. One angle measures 80° . What is the measure of the **vertically opposite** angle? _____
28. Two angles are **complementary**. One measures 22° . Find the other angle.

29. Two angles are **supplementary**. One measures 110° . Find the other angle.

30. Two angles are **complementary**. One measures 26° . Find the other angle.

31. Two angles are **supplementary**. One measures 56° . Find the other angle.

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32. Two angles are **complementary**. One measures 25° . Find the other angle.

33. Two lines intersect. One angle measures 95° . What is the measure of the **vertically opposite** angle? _____
34. Two lines intersect. One angle measures 36° . What is the measure of the **vertically opposite** angle? _____
35. Two angles are **complementary**. One measures 70° . Find the other angle.

36. Two lines intersect. One angle measures 143° . What is the measure of the **vertically opposite** angle? _____
37. Two angles are **supplementary**. One measures 132° . Find the other angle.

38. Two angles are **supplementary**. One measures 140° . Find the other angle.

39. Two angles are **complementary**. One measures 36° . Find the other angle.

40. Two lines intersect. One angle measures 141° . What is the measure of the **vertically opposite** angle? _____
41. Two angles are **complementary**. One measures 56° . Find the other angle.

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- 42.** Two angles are **complementary**. One measures 53° . Find the other angle.

- 43.** Two angles are **supplementary**. One measures 85° . Find the other angle.

- 44.** Two angles are **supplementary**. One measures 117° . Find the other angle.

- 45.** Two angles are **supplementary**. One measures 69° . Find the other angle.

- 46.** Two angles are **complementary**. One measures 10° . Find the other angle.

- 47.** Two lines intersect. One angle measures 110° . What is the measure of the **vertically opposite** angle? _____
- 48.** Two lines intersect. One angle measures 102° . What is the measure of the **vertically opposite** angle? _____
- 49.** Two lines intersect. One angle measures 99° . What is the measure of the **vertically opposite** angle? _____
- 50.** Two lines intersect. One angle measures 52° . What is the measure of the **vertically opposite** angle? _____
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Answer Key — Angle Relationships

1. 19°

2. 122°

3. 43°

4. 154°

5. 137°

6. 115°

7. 17°

8. 98°

9. 86°

10. 26°

11. 18°

12. 105°

13. 70°

14. 72°

15. 41°

16. 53°

17. 42°

18. 153°

19. 79°

20. 22°

21. 55°

22. 69°

23. 78°

24. 92°

25. 106°

26. 58°

27. 80°

28. 68°

29. 70°

30. 64°

31. 124°

32. 65°

33. 95°

34. 36°

35. 20°

36. 143°

37. 48°

38. 40°

39. 54°

40. 141°

41. 34°

42. 37°

43. 95°

44. 63°

45. 111°

46. 80°

47. 110°

48. 102°

49. 99°

50. 52°
