School786
AN ONLINE SCHOOL

Name: Due Date: Teacher: Parent Sign:

Questions

1. Two straight lines intersect. One angle measures 70°. What is the measure of the vertical (opposite) angle?

2. Two straight lines intersect. One acute angle measures 40°. What is the measure of its adjacent linear-pair angle?

3. A straight line forms a linear pair with an angle of 125°. What is the measure of the other angle in the linear pair?

4. Two lines intersect and form four angles. If one angle is 95°, find the measure of the adjacent angle that is supplementary to it.

5. A pair of vertical angles are each 54°. What is the measure of each angle?

6. Two intersecting lines form an angle of 30°. What are the measures of the other three angles formed?

7. If one angle at an intersection is 180° - x and it equals 110°, what is x?

8. Two lines intersect. One angle is 90°. What are the measures of the other three angles formed?

9. A line crosses another line creating an angle of 145°. What is the measure of the angle adjacent to it on the straight line?

10. If an angle and its adjacent angle sum to 180° and one is twice the other, what are the two angles?

11. Two parallel lines are cut by a transversal. A corresponding angle measures 68°. What is the measure of the alternate interior angle on the opposite side of the transversal?

12. Parallel lines cut by a transversal make a corresponding angle of 112°. What is the measure of the angle vertically opposite to that corresponding angle?

13. Lines l and m are parallel and cut by transversal t. If one interior angle on the same side of the transversal is 130°, what is the measure of its consecutive interior partner?

14. Two parallel lines are cut by a transversal. If one angle is 47°, what is the corresponding angle at the other parallel line?

15. A transversal cuts two parallel lines. An angle at one intersection is 23°. What is its alternate exterior angle?

16. Two parallel lines are cut by a transversal. One angle is 85°. What is the measure of the supplementary angle on the same intersection?

17. Parallel lines: one angle created by the transversal is 56°. What is the angle vertically opposite to it?

18. Two parallel lines cut by a transversal produce an angle of 74°. What is the measure of the adjacent interior angle on the same intersection?

19. Parallel lines cut by a transversal: one angle is 90°. What are all four angles at that intersection?

20. If two parallel lines are cut by a transversal and one corresponding angle is x = 36°, what is the equal corresponding angle on the other line?

21. A line perpendicular to another forms a right angle. If one angle is 90°, what is the measure of the adjacent angle that is also formed by the perpendicular lines?

22. A transversal is perpendicular to one of two parallel lines. What is the angle measure where the transversal meets the parallel line?

23. Two lines are perpendicular. One angle is 90°. What are the four angles formed at the intersection?

24. A transversal is perpendicular to two parallel lines. What is the measure of the acute angle formed at each intersection?

25. Lines AB and CD are perpendicular; one acute angle is 90°. If a transversal crosses AB making an angle of 30° with AB, what is the supplementary angle at that intersection?

26. A transversal perpendicular to a line creates 90° and 90° at the intersection. What is the measure of any angle adjacent to one of these 90° angles along the line?

27. If two lines are perpendicular and a small angle formed is 35° (measured outside the right-angle orientation), what's wrong with this statement? (Short numeric answer: what should the small angle be?)

28. A transversal is perpendicular to two parallel lines; one angle shown is 90°. What is the measure of its corresponding angle on the other parallel line?

29. Two perpendicular lines intersect. If one angle is labeled 90°, what is its vertical opposite angle?

30. If a transversal meets a line at 90° and another transversal meets the same line at 30°, what is the complementary angle to 30°?

31. Two parallel lines are cut by a transversal. One interior angle is given as $(2x + 10)°$ and its consecutive interior partner is 110°. Solve for x and give the measured angle (the 110° partner).

32. Parallel lines cut by a transversal: corresponding angles are equal. If one corresponding angle is $(3x - 5)°$ and equals 70°, find x and the angle measure.

33. Two parallel lines and a transversal give alternate interior angles: one is $(x + 20)°$ and its congruent partner is 65°. Find x and the angle measure.

34. A straight line creates supplementary angles $(4x)°$ and $(2x + 40)°$. Find x and the two angle measures.

35. On parallel lines, a same-side interior pair are $(5x - 10)°$ and 130°. These are supplementary. Find x and the angle measures.

36. A transversal makes an angle $(x + 15)°$ that is complementary to a 75° angle. Find x and the angle measure of $(x + 15)°$.

37. Two lines intersect: one vertical angle is $(2x + 30)°$ and equals 110°. Find x and the angle measure.

38. A linear pair is $(6x - 20)°$ and 100°. Find x and the measure of $(6x - 20)°$.

39. On parallel lines, a corresponding angle is $(x + 40)°$ and equals its alternate interior 100°. Find x and the angle.

40. Two lines are perpendicular. One adjacent angle is $(3x)°$ and equals 90°. Find x and the angle measure.

41. A transversal cuts parallel lines. If one acute angle is 52°, what is the measure of the adjacent obtuse angle at the same intersection?

42. Two parallel lines cut by a transversal: one exterior angle is 35°. What is the corresponding interior angle on the other side of the transversal?

43. At an intersection, one angle measures 140°. What are the other three angle measures around that point?

44. A transversal creates four angles at one intersection: if one acute angle is 40°, what are the other three angles at that same intersection?

45. Two parallel lines are crossed by a transversal. If one angle is 128°, what is the measure of its supplementary partner at the same intersection?

46. A line intersects two parallel lines. An angle is given as 62°. What is the measure of the alternate interior angle equal to it?

47. A pair of vertical angles sum to 180°. If one vertical angle is 82°, what is its vertical opposite and the other two angles at the intersection?

48. Two parallel lines cut by a transversal produce alternate exterior angles of 58°. What is the measure of the corresponding interior angle adjacent to one of them?

49. A transversal crosses parallel lines and produces angles of 60° and 120° at one intersection. Identify which are acute and which are obtuse (numeric answer: list the measures as acute or obtuse).

50. Two intersecting lines create angles in ratio 2:3 for a linear pair. What are the two angle measures?