Name: **Grade:** **Score:**

Worksheet #1

MeandMath

ADJACENT ANGLES

Learning goal: Students will be able to Identify adjacent angles, calculate unknown adjacent angles, distinguish adjacent angles from other angle relationships.

PROBLEM	ANSWER & EXPLANATION
Two adjacent angles, ∠ABC = 35° and ∠CBD, form a straight line. Find ∠CBD.	
∠PQR = 50° and ∠RQS are adjacent. If ∠PQS = 120°, find ∠RQS.	
Two adjacent angles, ∠LMN = 70° and ∠NMO, add up to 150°. Find ∠NMO.	
∠EFG = 25° and ∠GFH are adjacent. If ∠EFH = 90°, find ∠GFH.	
∠XYZ = 40° and ∠WYX are adjacent. If ∠WYZ is a right angle (90°), find ∠WYX.	
Two adjacent angles, ∠JKL = 60° and ∠LKM, form a right angle. Find ∠LKM.	
∠AOB = 30° and ∠BOC are adjacent. If ∠AOC = 100°, find ∠BOC.	
Two adjacent angles, ∠UVW = 55° and ∠WVX, add up to 130°. Find ∠WVX.	
∠CDE = 15° and ∠EDF are adjacent. If ∠CDF is a straight angle (180°), find ∠EDF.	
∠GHI = 80° and ∠IHJ are adjacent. If ∠GHJ = 110°, find ∠IHJ.	

Name: **Grade:** **Score:**

Worksheet #1(Answers)

MeandMath

ADJACENT ANGLES

Learning goal: Students will be able to Identify adjacent angles, calculate unknown adjacent angles, distinguish adjacent angles from other angle relationships.

PROBLEM	ANSWER & EXPLANATION
Two adjacent angles, ∠ABC = 35° and ∠CBD, form a straight line. Find ∠CBD.	Adjacent angles on a straight line add up to 180°. So, ∠CBD = 180° - 35° = 145°. Answer: 145°
∠PQR = 50° and ∠RQS are adjacent. If ∠PQS = 120°, find ∠RQS.	Since ∠PQR + ∠RQS = ∠PQS, then 50° + ∠RQS = 120° ∠RQS = 70°. Answer: 70°
Two adjacent angles, ∠LMN = 70° and ∠NMO, add up to 150°. Find ∠NMO.	∠LMN + ∠NMO = 150° 70° + ∠NMO = 150° ∠NMO = 80°. Answer: 80°
∠EFG = 25° and ∠GFH are adjacent. If ∠EFH = 90°, find ∠GFH.	∠EFG + ∠GFH = ∠EFH 25° + ∠GFH = 90° ∠GFH = 65°. Answer: 65°
∠XYZ = 40° and ∠WYX are adjacent. If ∠WYZ is a right angle (90°), find ∠WYX.	∠WYX + ∠XYZ = ∠WYZ ∠WYX + 40° = 90° ∠WYX = 50°. Answer: 50°
Two adjacent angles, ∠JKL = 60° and ∠LKM, form a right angle. Find ∠LKM.	∠JKL + ∠LKM = 90° 60° + ∠LKM = 90° ∠LKM = 30°. Answer: 30°
∠AOB = 30° and ∠BOC are adjacent. If ∠AOC = 100°, find ∠BOC.	∠AOB + ∠BOC = ∠AOC 30° + ∠BOC = 100° ∠BOC = 70°. Answer: 70°

Two adjacent angles, ∠UVW = 55° and ∠WVX, add up to 130°. Find ∠WVX.	∠UVW + ∠WVX = 130° 55° + ∠WVX = 130° ∠WVX = 75°. Answer: 75°
∠CDE = 15° and ∠EDF are adjacent. If ∠CDF is a straight angle (180°), find ∠EDF.	∠CDE + ∠EDF = 180° 15° + ∠EDF = 180° ∠EDF = 165°. Answer: 165°
∠GHI = 80° and ∠IHJ are adjacent. If ∠GHJ = 110°, find ∠IHJ.	∠GHI + ∠IHJ = ∠GHJ → 80° + ∠IHJ = 110° → ∠IHJ = 30°. Answer: 30°