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

Worksheet #2

MeandMath

LINEAR PAIR

Learning goal: Students will be able to recognize linear pairs as special adjacent angles forming 180°, Solve for missing angles in linear pair configurations.

PROBLEM	ANSWER & EXPLANATION
Two angles form a linear pair. If one angle is 75°, find the other.	
One angle of a linear pair is 110°. What is the measure of its supplement?	
Two angles in a linear pair are equal. Find each angle.	
If one angle of a linear pair is 25° more than the other, find both angles.	
A linear pair has angles in the ratio 2:3. Find the larger angle.	
One angle of a linear pair is twice the other. Find the smaller angle.	
Two lines intersect to form a linear pair. If one angle is 40°, find the other three angles.	
If the difference between two angles in a linear pair is 30°, find the angles.	
An angle in a linear pair is 15° less than its supplement. Find both angles.	
Three rays meet at a point to form three angles, two of which are a linear pair (50° and 130°). If the third angle is 60°, verify if the angles add up to 360°.	

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

Worksheet #2(Answers)

MeandMath

LINEAR PAIR

Learning goal: Students will be able to recognize linear pairs as special adjacent angles forming 180°, Solve for missing angles in linear pair configurations.

PROBLEM	ANSWER & EXPLANATION
Two angles form a linear pair. If one angle is 75°, find the other.	Linear pairs add to 180°. So, the other angle = 180° – 75° = 105°. Answer: 105°
One angle of a linear pair is 110°. What is the measure of its supplement?	The supplement (other angle) = 180° – 110° = 70°. Answer: 70°
Two angles in a linear pair are equal. Find each angle.	Let each angle be x. Then, x + x = 180° 2x = 180° x = 90°. Answer: 90°
If one angle of a linear pair is 25° more than the other, find both angles.	Let the smaller angle be x. Then, x + (x + 25°) = 180° 2x = 155° x = 77.5°. The other angle = 77.5° + 25° = 102.5°. Answer: 77.5° and 102.5°
A linear pair has angles in the ratio 2:3. Find the larger angle.	Let the angles be 2x and 3x. Then, 2x + 3x = 180° 5x = 180° x = 36°. The larger angle = 3x = 108°. Answer: 108°
One angle of a linear pair is twice the other. Find the smaller angle.	Let the smaller angle be x. Then, x + 2x = 180° 3x = 180° x = 60°. Answer: 60°

Two lines intersect to form a linear pair. If one angle is 40°, find the other three angles.	The adjacent angle (linear pair) = 180° – 40° = 140°. The vertically opposite angles are equal (40° and 140°). Answer: 140°, 40°, 140°
If the difference between two angles in a linear pair is 30°, find the angles.	Let the angles be x and (x + 30°). Then, x + (x + 30°) = 180° 2x = 150° x = 75°. The other angle = 75° + 30° = 105°. Answer: 75° and 105°
An angle in a linear pair is 15° less than its supplement. Find both angles.	Let the supplement be x. Then, the angle = x – 15°. So, (x – 15°) + x = 180° 2x = 195° x = 97.5°. The angle = 97.5° – 15° = 82.5°. Answer: 82.5° and 97.5°
Three rays meet at a point to form three angles, two of which are a linear pair (50° and 130°). If the third angle is 60°, verify if the angles add up to 360°.	The fourth angle (adjacent to 60°) forms another linear pair: 180° – 60° = 120°. Total sum = 50° + 130° + 60° + 120° = 360° (full rotation). Yes (50° + 130° + 60° + 120° = 360°)