Angles and their Measures

Today, we are going to look at angles, which are corner spaces created by two straight paths that intersect, or cross one another. Before we get to angles, though, lets look at circles.

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|  | **1. Remember, one rotation around a circle measures \_\_\_\_\_\_\_\_\_\_ degrees.** |
|  | **2. This means that half of a rotation around a circle must measure \_\_\_\_\_\_\_\_\_\_ degrees.** |
|  | **3. A quarter of a rotation around a circle must measure \_\_\_\_\_\_\_\_\_\_ degrees.** |

A straight path represents half of a circle of rotation, which means that all straight paths represent \_\_\_\_\_\_\_\_\_\_˚ rotations. But when a straight path intersects with other straight path, though, angles of different degree measures are formed.

**4. Look at the 4 angles shown below and answer each question.**

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| **4a. Which of the angles, if any, measure less than 90˚? How do you know?** | **4b. Which of the angles, if any, are equal to 90˚? How do you know?** | **4c. Which of the angles, if any, measure more than 90˚? How do you know?** |
| **4d. Which of the angles, if any, measure less than 180˚? How do you know?** | **4e. Which of the angles, if any, are equal to 180˚? How do you know?** | **4f. Which of the angles, if any, measure more than 180˚? How do you know?** |

5. There are three different angles in the image shown below.

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|  | **The three angles are: \_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_, & \_\_\_\_\_\_\_\_\_\_\_\_\_\_.**  **What do you notice about these three angles?** |

6.

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| --- | --- |
|  | **The three angles are: \_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_, & \_\_\_\_\_\_\_\_\_\_\_\_\_\_.**  **What do you notice about these three angles?** |

When a line, or any straight path, is broken by another straight path, meaning that the paths do not meet at their endpoints, then a figure called a **linear pair** is created.

**7. What angles below form linear pairs? How do you know?**

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**8. How many linear pairs do you see in the figure below? Identify the linear pairs as sets of two angles.**

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