

## Answer Key/Possible Solutions

### Classifying Angles (Day 1, steps N-O)

- Parts A/B: Groupings will vary based on the characteristics students identify and choose to sort by. Each group should include angles with the same common property. Some sample groupings could be:
  - **Group 1:** e, n, h (smaller angles)      **Group 2:** b, k, q (larger angles)
  - **Group 1:** b, e, n, h, q (contain “corners”)      **Group 2:** k (no “corner”)

### Clock worksheet (Day 2, step V) (Day 3, step T)

- The angle classifications and unit angle measurements are as follows.  
(*The ~ symbol is used to show approximations in the angle measurements.*)

Obtuse, 5	Right, 4	Acute, 1 ½
Obtuse, ~6	Acute, 3 1/3	Obtuse, ~5
Straight, 8	Acute, ~3	Acute, 1 ½
Obtuse, 6	Acute, 1 ½	Perigon, 16

### Defining Angles (Day 2, steps O, Q, R, W)

- Specific details will be added to this chart throughout the week’s instruction. Use the vocabulary that you want the students to use in their descriptions. Some sample details are given below.
  - Perigon: sides complete a full rotation; the angle opening is a circle; 16 unit angles
  - Acute: sides complete less than a ¼ rotation; the angle opening is smaller than a right angle; more than 0 but less than 4 unit angles
  - Right: sides complete a ¼ rotation; a square fits snugly in the angle opening; measures 4 unit angles
  - Obtuse: sides complete more than ¼ rotation but less than a ½ rotation; angle opening is larger than a right angle but smaller than a straight angle; more than 4 but less than 8 unit angles
  - Straight: sides complete a ½ rotation; the angle opening is a semicircle; 8 unit angles
  - Reflex: sides complete more than a ½ rotation but less than a full rotation; angle opening is larger than a straight angle but smaller than a perigon; more than 8 but less than 16 unit angles

### Classifying Angles—Homework (Day 4, step J)

- This classification should reflect the characteristics and specific vocabulary studied during the past few days. Some possible classifications could be:
  - **Group 1:** e, h, n (acute and right angles; 4 unit angles or less)
  - **Group 2:** b, q, k (obtuse and straight angles; more than 4 unit angles but not more than 8)
  - **Group 1:** k (8 unit angles; straight angle)
  - **Group 2:** b, e, n, h, q (less than 8 unit angles; not straight angles)