

# Answers for Grade 10 Group Assignments - Quarter #2

## Notes:

- Answers for group assignment problems that are out of the workbook can be found in the file titled "G10 Answers...".
- This answer key doesn't include all answers.

## Week 9

### For Tuesday

- *Triangle Exterior Angle Theorem.* The exterior angle is equal to the sum of the opposite two interior angles.
- *Outside Angle Theorem.*
  - 3)  $\angle 1 = \angle C + \angle 2$
  - 4)  $\angle 1 = \frac{1}{2} \angle A$  and  $\angle 2 = \frac{1}{2} \angle B$
  - 5) subbing into from step #3 gives us  $\frac{1}{2} \angle A = \angle C + \frac{1}{2} \angle B \rightarrow \angle C = \frac{1}{2} (\angle A - \angle B)$

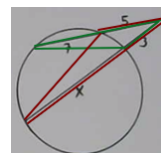
### For Thursday

- 1) Equilateral
- 2) isosceles
- 3) Hmm...
- 4) Obtuse
- 5) Right
- 6)  $X = Y$
- 7)  $C = A - 180^\circ$  and  $C = 180^\circ - B$

## Week 10

### For Tuesday

- *Circumscribed Quadrilateral Theorem.*
  - 6) The sum of the lengths of opposites sides are equal.
  - 7)  $x = 7$
- *Secant Segment Theorem.*
  - 4) The green and red triangles (on the right) are similar. Therefore,  
 $(5+7) : 3 = (x+3) : 5 \rightarrow 5 \cdot 12 = 3(x+3) \rightarrow 60 = 3x + 9 \rightarrow \underline{x = 17}$



### For Thursday

- *Secant Tangent Theorem.*
  - 3)  $AE \cdot BE = CE^2$

## Weeks 11-16

- No answers needed.