Date:

Unit 7 Review Sheet

Things to recall/remember:

- Special Right Triangles
 - o 30-60-90
 - o 45-45-90
- Indirect Proofs
- Using Trigonometry to find side lengths
- Using Trigonometry to find angle measures (Inverse Trig Functions)
- SOH CAH TOA
- Angle of Elevation
- Angle of Depression
- 1. Find the missing side lengths in the following diagrams:













-Reflexive Property	-Right Triangle
-Midpoint	-Equilateral
-Perpendicular Lines	Triangle
-Parallel Lines	-Substitution
-Segment Bisector	Postulate
-Angle Bisector	-Addition
-Median	Postulate
-Altitude	-Subtraction
-Isosceles Triangle	Postulate

Given:
$$\overline{BC} \cong \overline{BD}$$
,
 $\angle C \not\equiv \angle D$

Prove: $\angle CBA \not\cong \angle DBA$



3. Given: $\angle ADB \cong \angle CDB$, $\overline{AB} \neq \overline{CB}$

Prove: \overline{DB} does not bisect $\angle ABC$.



4. Find the missing side length to the nearest **tenth**:



5. Find the missing angle to the nearest **whole degree**:









6. A man flies a kite with a 100 foot string. The angle of elevation of the string is 52°. How high off the ground is the kite?

7. A person stands at the window of a building so that his eyes are 12.6 m above the level ground. An object is on the ground 58.5 m away from the building on a line directly beneath the person. Compute the angle of depression of the person's line of sight to the object on the ground.

8. A 14 foot ladder is used to scale a 13 foot wall. At what angle of elevation must the ladder be situated in order to reach the top of the wall?