Lesson 3: Angles—Worksheet

1. What is the supplement of $32°$?

$180° - 32° = 148°$

2. What is the complement of $29°\ 40'\ 20''$?

$$\begin{array}{lll} 89° & 59' & 60'' \\ 29° & 40' & 20'' \\ \hline 60° & 19' & 40'' \end{array}$$

3. Change to DMS units: $60.23°$.

$$\begin{aligned} &60° + (0.23 \cdot 60)' \\ &= 60° + 13.8' \\ &= 60° + 13' + (0.8 \cdot 60)'' \\ &= 60°\ 13'\ 48'' \end{aligned}$$

4. Change to degrees: $10°\ 24'\ 15''$.

$$\begin{aligned} &10° + 24' + (15/60)' \\ &= 10° + 24.25' \\ &= 10° + (24.25/60)° \\ &= 10.4041\overline{6}° \end{aligned}$$

5. One of the acute angles of a right triangle is $30°$. What is the other acute angle?

$90° - 30° = 60°$

6. In triangle *ABC*, angle *A* is 32.5 degrees and angle *B* is 92.2 degrees. What is angle *C*?

$\angle C = 180° - (32.5° + 92.2°) = 55.3°$