1.2 and 1.3

Tuesday, August 16, 2016 7:34 AM

convert to degrees, minutes, and seconds: $46\frac{11}{18}^\circ$

$\frac{11}{18}^\circ \times \frac{60'}{1^\circ} = 36\frac{2}{3}'$ $\quad \frac{2}{3}' \times \frac{60''}{1'} = 40''$

$46^\circ\ 36'\ 40''$

convert to degrees: $37^\circ\ 15'\ 45''$

$45'' \times \frac{1'}{60''} = \frac{3}{4}'$ $\quad 15\frac{3}{4}' = \frac{63}{4}'$ $\quad \frac{63}{4}' \times \frac{1^\circ}{60'} = \frac{21}{80}^\circ$

$37\frac{21}{80}^\circ$

Simplify:

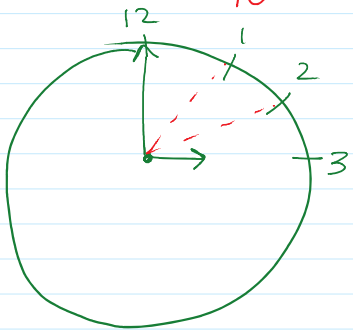
$$\begin{array}{r} 31^\circ\ 14'\ 58'' \\ +\ 16^\circ\ 37'\ 46'' \\ \hline 47^\circ\ 51'\ 104'' \end{array} \rightarrow 47^\circ\ 52'\ 44''$$

Simplify:

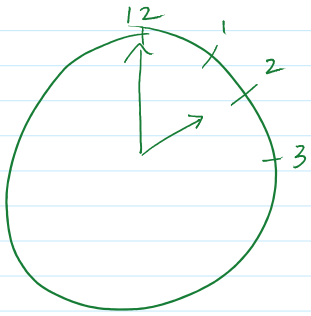
$$\begin{array}{r} 179^\circ\ 180^\circ\ 59'\ 60'' \\ -\ 110^\circ\ 13'\ 43'' \\ \hline 69^\circ\ 46'\ 17'' \end{array}$$

Find the precise angle measure formed by the hands of the clock for the following times.

3:00 90°

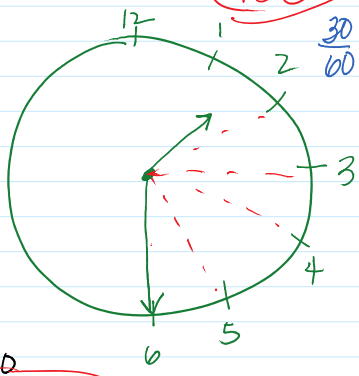


2:00 60°



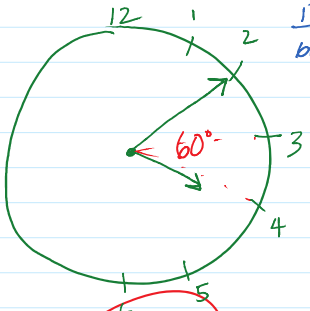
4:00 120°

1:30 135°



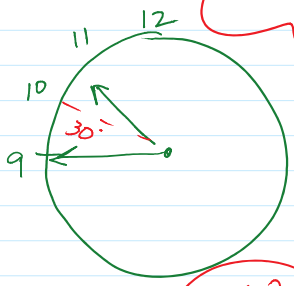
$\frac{30}{60} \cdot 30° = 15°$

4:10 65°



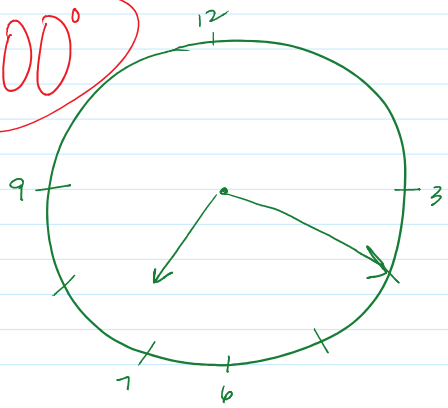
$\frac{10}{60} \cdot 30° = 5°$

10:45 52.5°

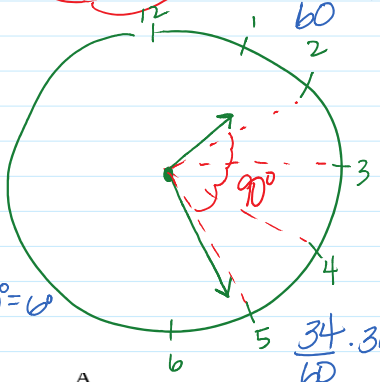


$\frac{45}{60} \cdot 30° = 22.5°$

7:20 100°



1:26 113°

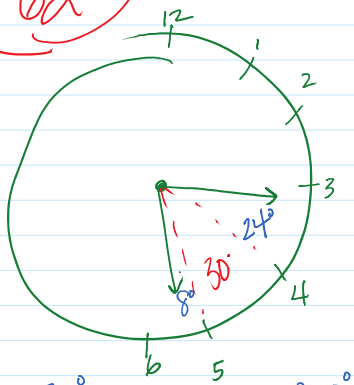


$\frac{26}{60} \cdot 30° = 13°$

$\frac{1}{5} \cdot 30° = 6°$

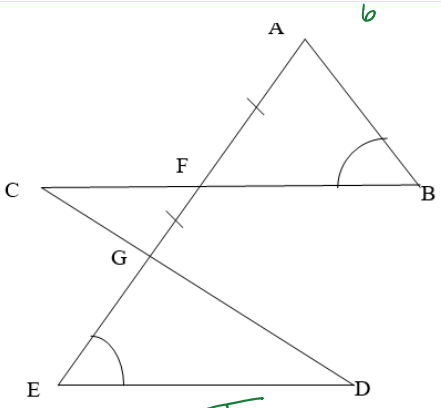
$\frac{34}{60} \cdot 30° = 17°$

5:16 62°



$\frac{1}{5} \cdot 30° = 6°$

$\frac{16}{60} \cdot 30° = 8°$



1) Point F is between points C and B T

2) Point A is between points C and B F

3) <A is an acute angle F

4) <CFB is a straight angle T

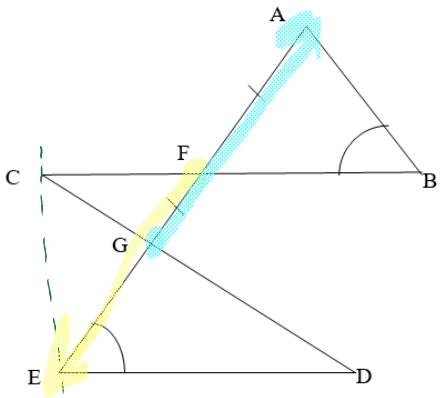
5) $\overline{FG}$ is congruent to $\overline{AF}$ T

6) Points C, F, and G are collinear F

7) Points C and E are collinear T

8) <E is congruent to <B T

9) <A is congruent to <B F



8) <E is congruent to <B T

9) <A is congruent to <B F

10) $\overrightarrow{FE} \cap \overrightarrow{GA} = \overline{GF}$ T