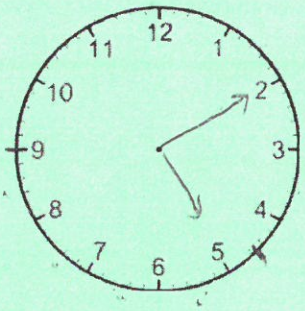
Key

If the hands are at the indicated locations, what time does the clock read?

Hour hand: $-210°$ 5

Minute hand: $\frac{7\pi}{3}$ $2\frac{1}{3}$ 2

5:10



What are the central angle measures (positive and negative degrees and radians) as well as the arc length, given the two hour hand placements

4:30 and 9

135° −225°

$\frac{3\pi}{4}$ $\frac{-5\pi}{4}$

2.36 3.93

11 and 7

240 −120

$\frac{4\pi}{3}$ $-\frac{2\pi}{3}$

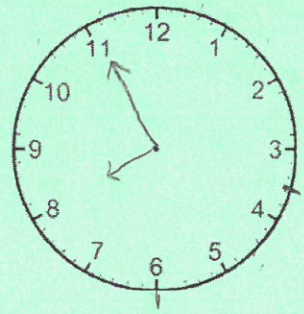
4.19 2.09

If the hands are at the indicated locations, what time does the clock read?

Hour hand: $\frac{10\pi}{3}$ $3\frac{1}{3}$ 8

Minute hand: $-390°$ 11

8:55



What are the central angle measures (positive and negative degrees and radians) as well as the arc length, given the two hour hand placements

3:30 *and* 6

75° −285°

$5\pi/12$ $-19\pi/12$

1.31 4.97

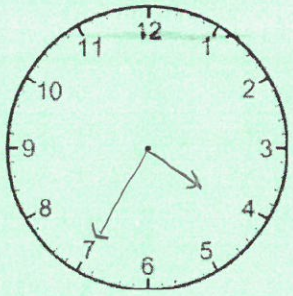
10 *and* 5

210° −150°

$\frac{7\pi}{6}$ $\frac{-5\pi}{6}$

3.67 2.62

If the hands are at the indicated locations, what time does the clock read?



Hour hand: 840° -720° 4

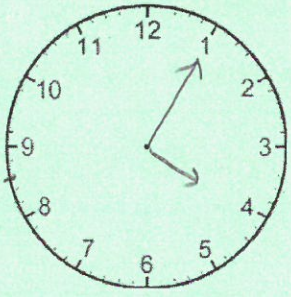
Minute hand: $-\frac{17\pi}{6}$ $-2\frac{5}{6}$ 7

4:35

What are the central angle measures (positive and negative degrees and radians) as well as the arc length, given the two hour hand placements

9 *and* 7		8 *and* 12:30	
300°	-60°	135°	-225°
$\frac{5\pi}{3}$	$-\frac{\pi}{3}$	$\frac{3\pi}{4}$	$-\frac{5\pi}{4}$
5.24	1.05	2.36	3.92

If the hands are at the indicated locations, what time does the clock read?



Hour hand: 480° -360° 4

Minute hand: $-\frac{11\pi}{6}$ $-1\frac{5}{6}$ 1

4:05

What are the central angle measures (positive and negative degrees and radians) as well as the arc length, given the two hour hand placements

10 and 7		8:30 and 3	
270°	-90°	195°	-165°
$\frac{3\pi}{2}$	$-\frac{\pi}{2}$	$\frac{13\pi}{2}$	$-\frac{11\pi}{12}$
4.71	1.57	3.40	2.88