

Geo Review Sections 10.6, 10.7, 12.1, 12.3, 12.5

SECTION I

① $m\angle AED + 48 = 180$

$m\angle AED = 132^\circ$

② $m\angle DEC + 90 = 180$

$m\angle DEC = 90^\circ$

③ $m\widehat{BC} = 90^\circ$ CAEIA

④ $m\widehat{BAC} = 360 - 90 = 270^\circ$

⑤ $m\widehat{DA} = 132^\circ$ CAEIA

⑥ $m\widehat{ADC} = 132 + 90 = 222^\circ$

⑦ length of $\widehat{AB} = \frac{48}{360} \cdot 2\pi(4.5) = \frac{2}{15} \cdot 9\pi = \frac{18\pi}{15} = \frac{6\pi}{5} \approx 3.8 \text{ in}$

⑧ length of $\widehat{AD} = \frac{132}{360} \cdot 2\pi(4.5) = \frac{11}{30} \cdot 9\pi = \frac{99\pi}{30} = \frac{33\pi}{10} \approx 10.4 \text{ in}$

⑨ length of $\widehat{BC} = \frac{90}{360} \cdot 2\pi(4.5) = \frac{1}{4} \cdot 9\pi = \frac{9\pi}{4} \approx 7.1 \text{ in}$

SECTION II

① $m\angle XWZ = 180/2 = 90^\circ$

② $m\widehat{ZQ} = 2(62) = 124^\circ$

$m\angle XQ = 180 - 124 = 56^\circ$

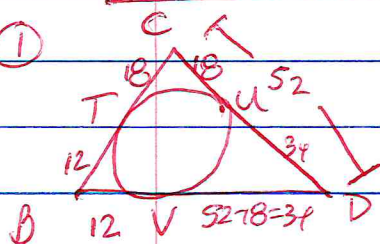
③ $m\widehat{WX} = 180 - 70 = 110^\circ$

④ $m\widehat{WZQ} = 70 + 124 = 194^\circ$

$m\angle XZW = 110/2 = 55^\circ$

SECTION III

①



$P = 52 + 18 + 12 + 12 + 34 = 128u$

② $x^2 + 8^2 = (x + 4)^2$

$x^2 + 64 = x^2 + 8x + 16$

$-x^2 \quad -16 \quad -x^2 \quad -16$

$8x = 48$

$x = 6$

⑤ $a + 75 = 180$

$a = 105^\circ$

③ $x + 90 + 90 + 115 = 360$

$x + 295 = 360$

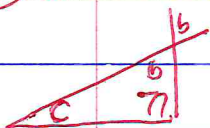
$x = 65^\circ$

④ $1.9 + 1.9 + .9 + .9 + 2.7 + 2.7 + 1.3 + 1.3 = 13.6 \text{ cm}$

$b + 80 = 180$

⑥ $a = 77.2 = 154^\circ$

$b = 100^\circ$



$c = 54 \div 2 = 27^\circ$

$b + 77 + 27 = 180$

$b + 104 = 180$

$b = 76^\circ$