

12. The arc measurement is the same as the measure of the central angle, so  $\text{Arc } TC = 128^\circ$
16.  $\text{Arc } TC$  and  $\text{Arc } CD$  form a semi-circle, so  $m \text{ Arc } CD = 180 - 128 = 52^\circ$
20.  $\text{Arc } TC$  and  $\text{Arc } TDC$  form a full circle, so  $m \text{ Arc } TDC = 360 - 128 = 232^\circ$
26.  $C = 2\pi r$        $C = 2\pi(4.2) = 8.4\pi$  m.
30.  $\frac{45}{360} = \frac{l}{2\pi(14)}$       Cross multiply       $3.5\pi = l$       the length of the arc is  $3.5\pi$  cm.
38.  $\text{Arc } E J H$  is a semi-circle so its measure is  $180^\circ$
42.  $\text{Arc } H F J$  and  $\text{Arc } H J$  form a circle so  $m \text{ Arc } H F J = 360 - 70 = 290^\circ$
48. All three arcs should add to 360:       $360 = (x + 40) + (3x + 20) + (2x + 60)$       so by adding like terms       $360 = 6x + 120$       by subtraction       $240 = 6x$       and by division       $40 = x$
52.  $\frac{(180 + 45)}{360} = \frac{l}{2\pi(4.1)}$       Cross multiply       $5.125\pi = l$       the length of the arc is  $5.125\pi$  ft.
60.  $\frac{60}{360} = \frac{l}{2\pi(12)}$       Cross multiply       $4\pi = l$       the length of the arc is  $4\pi$  cm.

which is answer B.