For each, a central angle in radians and a radius length is given. For arcs, shade/highlight the arc length and then find the exact length of the arc. For sectors, shade in the sector and find the exact area.

E1: $r=4, \theta=\frac{2 \pi}{3}$, find arc length


E2: $r=3, \theta=\frac{3 \pi}{4}$, find sector area

$2: r=2, \theta=\frac{4 \pi}{3}$, find sector area


4: $r=2, \theta=\frac{7 \pi}{6}$, find sector area

$5: r=3, \theta=\frac{3 \pi}{2}$, find arc length

$7: r=2, \theta=\frac{7 \pi}{4}$, find arc length


9: $r=3, \theta=\frac{5 \pi}{3}$, find arc length


6: $r=6, \theta=\frac{2 \pi}{3}$ find sector area

$8: r=3, \theta=\frac{11 \pi}{6}$, find sector area


10: $r=2, \theta=\frac{5 \pi}{3}$, find sector area


