Special Angles /22

1. Evaluate exactly **without using a calculator**. Leave answers involving radicals in exact radical form. Include a diagram to support your answer. (8 marks)

a) cos150⁰ b) sin45⁰

c) tan315⁰ d) cos270⁰

2. Find all θ, 0⁰ ≤ θ < 360⁰, which satisfy each equation **without using a calculator**. Include a diagram to support your answer. (8 marks)

a) $sinθ=-\frac{\sqrt{3}}{2}$ b) $cosθ=\frac{1}{\sqrt{2}}$

c) $sinθ=1$ d) $tanθ=-\sqrt{3}$

3. To the nearest degree find all θ, 0⁰ ≤ θ < 360⁰, which satisfy each equation. (6 marks)

a) sinθ = 0.829 b) cosθ = 0.848 c) tanθ = -3.487