N5 Maths: Trigonometric Equations

Answers

Q1 **a)** $140°, 220°, 320°$ **b)** $110°, 250°, 290°$ **c)** $155°, 205°, 335°$

d) $80°, 260°, 280°$ **e)** $30°, 210°, 330°$ **f)** $45°, 135°, 315°$

g) $80°, 100°, 280°$ **h)** $50°, 130°, 230°$ **i)** $5°, 175°, 185°$

Q2 **a)** $\frac{1}{2}$ **b)** $-\frac{1}{2}$ **c)** $-\frac{1}{2}$

Q3 **a)** $-\frac{1}{\sqrt{2}}$ **b)** $-\frac{1}{\sqrt{2}}$ **c)** $\frac{1}{\sqrt{2}}$

Q4 **a)** $-\sqrt{3}$ **b)** $\sqrt{3}$ **c)** $-\sqrt{3}$

Q5 **a)** $sin\ 270°,\ sin\ 335°,\ sin\ 100°,\ sin\ 90°$

b) $cos\ 180°,\ cos\ 236°,\ cos\ 350°,\ cos\ 0°$

c) $tan\ 295°,\ tan\ 180°,\ tan\ 65°$

Q6 **a)** $x = 17.5°$ or $162.5°$ **b)** $x = 134.4°$ or $225.6°$ **c)** $x = 21.8°$ or $201.8°$

d) $x = 202.0°$ or $338.0°$ **e)** $x = 55.9°$ or $304.1°$ **f)** $x = 116.6°$ or $296.6°$

g) $x = 48.2°$ or $131.8°$ **h)** $x = 156.9°$ or $203.1°$ **i)** $x = 170.5°$ or $350.5°$

Q7 **a)** $x = 11.5°$ or $168.5°$ **b)** $x = 131.8°$ or $228.2°$ **c)** $x = 31.0°$ or $211.0°$

d) $x = 14.5°$ or $165.5°$ **e)** $x = 64.6°$ or $295.4°$ **f)** $x = 119.7°$ or $299.7°$

g) $x = 23.6°$ or $156.4°$ **h)** $x = 138.6°$ or $221.4°$ **i)** $x = 80.5°$ or $260.5°$

j) $x = 221.8°$ or $318.2°$ **k)** $x = 70.5°$ or $289.5°$ **l)** $x = 110.6°$ or $290.6°$

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