

**ATHS FC – Math Department Al Ain (2012-2013)
Grade 11 Core/Revision Worksheet (1)**

Name		Date	
Section		Chapter/lesson(s)	12.7, 12.8, 12.9

Choose the Correct answer

- Find the period of $y = 2 \tan \frac{2}{3} \theta$
 A 540° B 270° C 240° D 120° 1. _____
- Find the phase shift of $y = 3 + 2 \cos (\theta + 90^\circ)$.
 A 2 B 3 C 90° D -90° 2. _____
- Find the period of $y = 4 \cos \frac{5}{2} \theta$
 A 900° B 450° C 144° D 72° 3. _____
- Find the phase shift of $y = -3 + \tan \frac{1}{2} \left(\theta + \frac{\pi}{2} \right)$
 A -3 B $\frac{1}{2}$ C $-\frac{\pi}{2}$ D $\frac{\pi}{2}$ 4. _____
- Find the period of $y = 2 \sin \frac{2}{5} \theta$
 A 900° B 450° C 144° D 72° 5. _____
- Find the vertical shift of $y = -3 + \tan \frac{1}{2} \left(\theta + \frac{\pi}{2} \right)$
 A -3 B $\frac{1}{2}$ C $-\frac{\pi}{2}$ D $\frac{\pi}{2}$ 6. _____
- Solve $y = \sin^{-1} \left(\frac{\sqrt{3}}{2} \right)$
 A 30° B 60° C 45° D 90° 7. _____
- Find the value of $\text{Sin}^{-1} (-1)$.
 A 30° B -45° C 180° D -90° 8. _____

9. Write the equation $\sin y = x$ in the form of an inverse function.

A
 $y = \sin^{-1} x$

B
 $x = \sin^{-1} y$

C
 $x = \sin y$

D
 $y = \sin x$

9. _____

10. Solve $y = \text{Arcsine } \frac{1}{2}$

A $-\frac{5\pi}{6}$

B $\frac{5\pi}{6}$

C $-\frac{\pi}{6}$

D $\frac{\pi}{6}$

10. _____

11. Find the value of \tan .

A -1

B 1

C $\frac{1}{2}$

D $-\frac{1}{2}$

11. _____

12. Write the equation $\tan b = c$ in the form of an inverse function.

A
 $b = \tan c$

B
 $c = \text{Tan}^{-1} b$

C
 $b = \text{Tan}^{-1} c$

D $\tan = \frac{b}{c}$

12. _____

13. Write the equation $2 \cos m = n$ in the form of an inverse function.

A
 $\cos^{-1} n = 2m$

B
 $\cos^{-1} 2n = m$

C
 $2\cos^{-1} n = m$

D
 $\cos^{-1} \frac{n}{2} = m$

13. _____

14. Solve. $y = \text{Cos}^{-1} \frac{\sqrt{2}}{2}$

A -135°

B -45°

C 45°

D 135°

14. _____

15. Find the value of $\tan \left(\text{Arccos } \frac{1}{2} \right)$

A 1.36

B 0.58

C 1.73

D 0.02

15. _____

16. Solve $x = \text{Arcsin} \left(\frac{1}{2} \right)$

A 30°

B -45°

C 180°

D -90°

16. _____

17. Find the value $\tan \left(\tan^{-1} \frac{3}{8} \right)$ Round to the nearest hundredth

A 87.21

B 0.375

C 1.14

D 0.415

17. _____

18. Find the value $\cos \left(2 \sin^{-1} \frac{4}{5} \right)$ Round to the nearest hundredth

A 1.54

B 88.40

C -0.28

D 0.415

18. _____