



1. Which of the following are true?

- a) $\sin 28^\circ = \cos 28^\circ$
- b) $\sin 41^\circ = \cos 49^\circ$
- c) $\sec 44^\circ = \operatorname{cosec} 46^\circ$
- d) $\cos 55^\circ = \sin 55^\circ$
- e) $\sin 43^\circ = \cos 47^\circ$
- f) $\tan 38^\circ = \cot 52^\circ$
- g) $\sin 54^\circ = \cos 36^\circ$

(i) {a,f,g} (ii) {d,c} (iii) {b,c,e,f,g} (iv) {a,b} (v) {a,d,e}

2. Which of the following are true?

- a) $\sec(90 - \theta) = \operatorname{cosec} \theta$
- b) $\tan(90 - \theta) = -\tan \theta$
- c) $\cos(90 - \theta) = \cot \theta$
- d) $\operatorname{cosec}(90 - \theta) = \sec \theta$
- e) $\cot(90 - \theta) = \tan \theta$
- f) $\cos(90 - \theta) = \cos \theta$

(i) {f,b,e} (ii) {b,a} (iii) {a,d,e} (iv) {c,a,d} (v) {c,d}

3. Which of the following are true?

- a) $\tan(90 - \theta) = \cot \theta$
- b) $\cos(90 - \theta) = \sin \theta$
- c) $\cos(90 - \theta) = -\cos \theta$
- d) $\sin(90 - \theta) = -\sin \theta$
- e) $\cot(90 - \theta) = \tan \theta$
- f) $\sin(90 - \theta) = \cos \theta$

(i) {c,d,e} (ii) {c,a} (iii) {d,b} (iv) {a,b,e,f} (v) {c,f,a}

4. Which of the following are true?

- a) $\sec(90 + \theta) = -\sec \theta$
- b) $\cot(90 + \theta) = -\cot \theta$
- c) $\sec(90 + \theta) = -\operatorname{cosec} \theta$
- d) $\cot(90 + \theta) = -\tan \theta$
- e) $\operatorname{cosec}(90 + \theta) = -\operatorname{cosec} \theta$
- f) $\operatorname{cosec}(90 + \theta) = \sec \theta$

(i) {e,a,f} (ii) {a,c} (iii) {b,c,d} (iv) {c,d,f} (v) {b,d}

5. Which of the following are true?

- a) $\tan(90 + \theta) = -\cot\theta$
- b) $\sin(90 + \theta) = -\sin\theta$
- c) $\cos(90 + \theta) = -\cos\theta$
- d) $\tan(90 + \theta) = -\tan\theta$
- e) $\cos(90 + \theta) = -\sin\theta$
- f) $\sin(90 + \theta) = \cos\theta$

(i) {d,b,f} (ii) {c,e} (iii) {a,e,f} (iv) {c,a,e} (v) {b,a}

6. Which of the following are true?

- a) $\tan(-\theta) = -\tan\theta$
- b) $\cos(-\theta) = \cos\theta$
- c) $\cos(-\theta) = -\cos\theta$
- d) $\sin(-\theta) = \sin\theta$
- e) $\tan(-\theta) = \tan\theta$
- f) $\sin(-\theta) = -\sin\theta$

(i) {e,c,f} (ii) {d,b} (iii) {a,b,f} (iv) {d,a,b} (v) {c,a}

7. Which of the following are true?

- a) $\sec(-\theta) = \sec\theta$
- b) $\cot(-\theta) = -\cot\theta$
- c) $\sec(-\theta) = -\sec\theta$
- d) $\cot(-\theta) = \cot\theta$
- e) $\operatorname{cosec}(-\theta) = -\operatorname{cosec}\theta$
- f) $\operatorname{cosec}(-\theta) = \operatorname{cosec}\theta$

(i) {a,b,e} (ii) {d,b} (iii) {c,a} (iv) {f,c,e} (v) {d,a,b}

8. Which of the following are true?

- a) $\sin(180 + \theta) = -\sin\theta$
- b) $\tan(180 + \theta) = \tan\theta$
- c) $\tan(180 + \theta) = \cot\theta$
- d) $\cos(180 + \theta) = -\cos\theta$
- e) $\cos(180 + \theta) = \sin\theta$
- f) $\sin(180 + \theta) = \cos\theta$

(i) {c,a} (ii) {e,a,b} (iii) {a,b,d} (iv) {e,b} (v) {f,c,d}

9. Which of the following are true?

- a) $\sin(180 - \theta) = \cos\theta$
- b) $\cos(180 - \theta) = -\sin\theta$
- c) $\tan(180 - \theta) = -\cot\theta$
- d) $\cos(180 - \theta) = -\cos\theta$
- e) $\sin(180 - \theta) = \sin\theta$
- f) $\tan(180 - \theta) = -\tan\theta$

(i) {a,d} (ii) {c,a,f} (iii) {b,d,e} (iv) {d,e,f} (v) {b,e}

10. Which of the following are true?

- a) $\operatorname{cosec}(180 + \theta) = \sec \theta$
- b) $\operatorname{cosec}(180 + \theta) = -\operatorname{cosec} \theta$
- c) $\sec(180 + \theta) = -\sec \theta$
- d) $\cot(180 + \theta) = \cot \theta$
- e) $\cot(180 + \theta) = \tan \theta$
- f) $\sec(180 + \theta) = \operatorname{cosec} \theta$

(i) {e,b,c} (ii) {b,c,d} (iii) {f,a,d} (iv) {a,b} (v) {e,c}

11. Which of the following are true?

- a) $\sec(180 - \theta) = -\sec \theta$
- b) $\operatorname{cosec}(180 - \theta) = \operatorname{cosec} \theta$
- c) $\operatorname{cosec}(180 - \theta) = \sec \theta$
- d) $\cot(180 - \theta) = -\cot \theta$
- e) $\sec(180 - \theta) = -\operatorname{cosec} \theta$
- f) $\cot(180 - \theta) = -\tan \theta$

(i) {f,c,d} (ii) {e,a,b} (iii) {e,b} (iv) {a,b,d} (v) {c,a}

12. Which of the following are true?

- a) $\sin(270 + \theta) = -\sin \theta$
- b) $\cos(270 + \theta) = \sin \theta$
- c) $\tan(270 + \theta) = -\cot \theta$
- d) $\cos(270 + \theta) = \cos \theta$
- e) $\tan(270 + \theta) = -\tan \theta$
- f) $\sin(270 + \theta) = -\cos \theta$

(i) {d,c} (ii) {d,b,c} (iii) {a,b} (iv) {e,a,f} (v) {b,c,f}

13. Which of the following are true?

- a) $\sin(270 - \theta) = -\cos \theta$
- b) $\sin(270 - \theta) = -\sin \theta$
- c) $\cos(270 - \theta) = -\cos \theta$
- d) $\cos(270 - \theta) = -\sin \theta$
- e) $\tan(270 - \theta) = \tan \theta$
- f) $\tan(270 - \theta) = \cot \theta$

(i) {a,d,f} (ii) {c,d} (iii) {e,b,f} (iv) {c,a,d} (v) {b,a}

14. Which of the following are true?

- a) $\cot(270 + \theta) = -\tan \theta$
- b) $\sec(270 + \theta) = \operatorname{cosec} \theta$
- c) $\cot(270 + \theta) = -\cot \theta$
- d) $\sec(270 + \theta) = \sec \theta$
- e) $\operatorname{cosec}(270 + \theta) = -\operatorname{cosec} \theta$
- f) $\operatorname{cosec}(270 + \theta) = -\sec \theta$

(i) {e,c,f} (ii) {c,a} (iii) {d,b} (iv) {d,a,b} (v) {a,b,f}

15. Which of the following are true?

- a) $\cot(270 - \theta) = \tan \theta$
- b) $\sec(270 - \theta) = -\sec \theta$
- c) $\cot(270 - \theta) = \cot \theta$
- d) $\sec(270 - \theta) = -\operatorname{cosec} \theta$
- e) $\operatorname{cosec}(270 - \theta) = -\operatorname{cosec} \theta$
- f) $\operatorname{cosec}(270 - \theta) = -\sec \theta$

(i) {e,b,f} (ii) {a,d,f} (iii) {c,a,d} (iv) {c,d} (v) {b,a}

16. Which of the following are true?

- a) $\sin(360 + \theta) = \cos \theta$
- b) $\tan(360 + \theta) = \tan \theta$
- c) $\cos(360 + \theta) = \sin \theta$
- d) $\tan(360 + \theta) = \cot \theta$
- e) $\sin(360 + \theta) = \sin \theta$
- f) $\cos(360 + \theta) = \cos \theta$

(i) {b,e,f} (ii) {c,e} (iii) {c,b,e} (iv) {a,b} (v) {d,a,f}

17. Which of the following are true?

- a) $\sin(360 - \theta) = -\sin \theta$
- b) $\cos(360 - \theta) = \cos \theta$
- c) $\cos(360 - \theta) = \sin \theta$
- d) $\sin(360 - \theta) = -\cos \theta$
- e) $\tan(360 - \theta) = -\cot \theta$
- f) $\tan(360 - \theta) = -\tan \theta$

(i) {d,b} (ii) {a,b,f} (iii) {e,c,f} (iv) {c,a} (v) {d,a,b}

Assignment Key

1) (iii)	2) (iii)	3) (iv)	4) (iv)	5) (iii)	6) (iii)
7) (i)	8) (iii)	9) (iv)	10) (ii)	11) (iv)	12) (v)
13) (i)	14) (v)	15) (ii)	16) (i)	17) (ii)	