

Name: \_\_\_\_\_

Date \_\_\_\_\_

Topic : Angle Sum and Difference, Double Angle and Half Angle Formulas-Worksheet 1

Do the following:

1. Find the exact value of  $\cos 54^\circ$ .
2. If  $\sin x = 3/4$ , find  $\cos (2x)$ .
3. Find the exact value of  $\sin 84^\circ$ .
4. Find the exact value of  $\sin 60^\circ \cos 46^\circ - \cos 60^\circ \sin 46^\circ$ .
5. Find the exact value of  $\cos 36^\circ$ .
6. Find the exact value of  $\cos 45^\circ \sin 65^\circ - \cos 65^\circ \sin 45^\circ$ .
7. Find the exact value of  $\sin 24^\circ$ .
8. Find the exact value of  $\sin 30^\circ \cos 55^\circ - \cos 30^\circ \sin 55^\circ$ .
9. Find the exact value of  $\cos 48^\circ$ .
10. Find the exact value of  $\sin 50^\circ \cos 25^\circ - \cos 50^\circ \sin 25^\circ$ .



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Topic : Angle Sum and Difference, Double Angle and Half Angle Formulas-Worksheet 2

Do the following:

1. Find the exact value of  $\sin 56^\circ$ .
2. If  $\cos x = 2/5$ , find  $\sin (2x)$ .
3. Find the exact value of  $\cos 82^\circ$ .
4. Find the exact value of  $\cos 70^\circ \sin 48^\circ - \cos 48^\circ \sin 70^\circ$
5. Find the exact value of  $\sin 38^\circ$ .
6. Find the exact value of  $\sin 70^\circ \cos 55^\circ - \cos 70^\circ \sin 55^\circ$
7. Find the exact value of  $\cos 26^\circ$ .
8. Find the exact value of  $\sin 35^\circ \cos 60^\circ - \cos 35^\circ \sin 60^\circ$
9. Find the exact value of  $\sin 44^\circ$ .
10. Find the exact value of  $\sin 60^\circ \cos 20^\circ - \cos 60^\circ \sin 20^\circ$



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Topic : Angle Sum and Difference, Double Angle and Half Angle Formulas-Worksheet 3

Do the following:

1. Find the exact value of  $\cos 58^\circ$ .
2. If  $\sin x = 1/3$ , find  $\cos (2x)$ .
3. Find the exact value of  $\sin 85^\circ$ .
4. Find the exact value of  $\sin 45^\circ \cos 30^\circ - \cos 45^\circ \sin 30^\circ$
5. Find the exact value of  $\cos 32^\circ$ .
6. Find the exact value of  $\sin 60^\circ \cos 46^\circ - \cos 60^\circ \sin 46^\circ$
7. Find the exact value of  $\sin 28^\circ$ .
8. Find the exact value of  $\cos 40^\circ \sin 55^\circ - \cos 55^\circ \sin 40^\circ$
9. Find the exact value of  $\cos 45^\circ$ .
10. Find the exact value of  $\sin 30^\circ \cos 55^\circ - \cos 30^\circ \sin 55^\circ$



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Topic : Angle Sum and Difference, Double Angle and Half Angle Formulas-Worksheet 4

Do the following:

1. Find the exact value of  $\sin 60^\circ$ .
2. If  $\sin x = 2/4$ , find  $\cos (2x)$ .
3. Find the exact value of  $\sin 80^\circ$ .
4. Find the exact value of  $\sin 50^\circ \cos 25^\circ - \cos 50^\circ \sin 25^\circ$ .
5. Find the exact value of  $\sin 40^\circ$ .
6. Find the exact value of  $\sin 60^\circ \cos 46^\circ - \cos 60^\circ \sin 46^\circ$ .
7. Find the exact value of  $\cos 30^\circ$ .
8. Find the exact value of  $\cos 45^\circ \sin 65^\circ - \cos 65^\circ \sin 45^\circ$ .
9. Find the exact value of  $\sin 65^\circ$ .
10. Find the exact value of  $\sin 30^\circ \cos 55^\circ - \cos 30^\circ \sin 55^\circ$ .



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Topic : Angle Sum and Difference, Double Angle and Half Angle Formulas-Worksheet 5

Do the following:

1. Find the exact value of  $\cos 62^\circ$ .
2. If  $\cos x = 1/2$ , find  $\sin (2x)$ .
3. Find the exact value of  $\cos 82^\circ$ .
4. Find the exact value of  $\sin 60^\circ \cos 20^\circ - \cos 60^\circ \sin 20^\circ$ .
5. Find the exact value of  $\cos 52^\circ$ .
6. Find the exact value of  $\sin 35^\circ \cos 60^\circ - \cos 35^\circ \sin 60^\circ$ .
7. Find the exact value of  $\sin 47^\circ$ .
8. Find the exact value of  $\sin 70^\circ \cos 55^\circ - \cos 70^\circ \sin 55^\circ$ .
9. Find the exact value of  $\cos 68^\circ$ .
10. Find the exact value of  $\cos 70^\circ \sin 48^\circ - \cos 48^\circ \sin 70^\circ$ .

