

Name \_\_\_\_\_

Date \_\_\_\_\_

## Angle Sum and Difference, Double Angle and Half Angle Formulas - Independent Practice Worksheet

Complete all the problems.

Find the exact value of:

1)  $\cos 20^\circ \cos 45^\circ + \sin 20^\circ \sin 45^\circ$

2)  $\cos 52^\circ \cos 32^\circ - \sin 52^\circ \sin 32^\circ$

3)  $\sin 22^\circ \cos 38^\circ + \cos 22^\circ \sin 38^\circ$

4)  $\sin 85^\circ \cos 20^\circ - \cos 85^\circ \sin 20^\circ$

5)  $\cos 12^\circ \cos 10^\circ - \sin 12^\circ \sin 10^\circ$

6) If  $\sin x = 5/6$ , find  $\cos (2x)$

7) If  $\sin x = 7/9$ , find  $\cos (2x)$

8) If  $\sin x = 2/8$ , find  $\cos (3x)$

9) If  $\sin x = 4/8$ , find  $\cos (6x)$

10) If  $\sin x = 2/8$ , find  $\cos (1x)$

