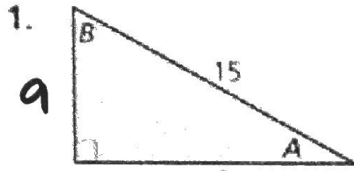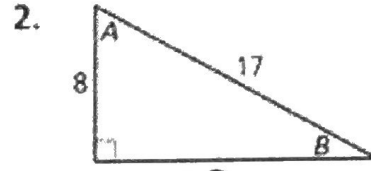Name: **Key**

Date: _____ Period: _____

Find the cosine and sine of the acute angles in the triangles shown.

1.

$\sin A = \frac{9}{15} = \boxed{\frac{3}{5}}$ $\cos A = \frac{12}{15} \boxed{\frac{4}{5}}$

$\sin B = \frac{12}{15} = \boxed{\frac{4}{5}}$ $\cos B = \frac{9}{15} = \boxed{\frac{3}{5}}$

2.

$\sin A = \frac{15}{17}$ $\cos A = \frac{8}{17}$

$\cos B = \frac{15}{17}$ $\sin B = \frac{8}{17}$

Write each trigonometric function in terms of its cofunction.

3. $\sin 64°$ cos 26°

4. $\cos 84°$ sin 6°

5. $\cos 38°$ sin 52°

6. $\sin 24°$ cos 66°

7. $\cos 72°$ sin 18°

8. $\sin 45°$ cos 45°

Find two angles that satisfy each equation.

9. $\sin(4x + 30)° = \cos(-2x + 54)°$

10. $\sin(-2x + 92)° = \cos(x + 8)°$

11. $\cos(5x + 49)° = \sin(3x + 57)°$

12. $\cos(-3x + 106)° = \sin(7x - 64)°$

13. $\sin(2x + 30)° = \cos(3x + 5)°$

14. $\sin(5x - 12)° = \cos(x + 54)°$

15. $\cos(3x - 10)° = \sin(3x - 20)°$

16. $\cos(7x - 68)° = \sin(-3x + 110)°$

9) 42° & 48°

10) 72° & 18°

11) 39° & 51°

12) 70° & 20°

13) 52° & 38°

14) 28° & 62°

15) 50° & 40°

16) 16° & 74°