



Math worksheet on 'Trigonometry - Solve Side Lengths from Values (Level 1)'. Part of a broader unit on 'Trigonometry - Law of Sines, Cosines - Intro'

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1 Solve for the side indicated

$$\sigma = 60^\circ$$

$$\text{hyp} = ?$$

$$\text{adj} = 10$$

a	b
$\text{hyp} = 22.0$	$\text{hyp} = 18.0$
c	d
$\text{hyp} = 16.0$	$\text{hyp} = 14.0$
e	f
$\text{hyp} = 24.0$	$\text{hyp} = 20.0$

2 Solve for the side indicated

$$\mu = 30^\circ$$

$$\text{hyp} = ?$$

$$\text{opp} = 5.8$$

a	b
$\text{hyp} = 11.6$	$\text{hyp} = 7.0$
c	d
$\text{hyp} = 12.8$	$\text{hyp} = 15.1$
e	f
$\text{hyp} = 8.1$	$\text{hyp} = 9.3$

3 Solve for the side indicated

$$\beta = 45^\circ$$

$$\text{hyp} = ?$$

$$\text{opp} = 4$$

a	b
$\text{hyp} = 5.7$	$\text{hyp} = 4.0$
c	d
$\text{hyp} = 6.2$	$\text{hyp} = 7.4$
e	f
$\text{hyp} = 7.9$	$\text{hyp} = 5.1$

4 Solve for the side indicated

$$\theta = 45^\circ$$

$$\text{hyp} = 11.3$$

$$\text{adj} = ?$$

a	b
$\text{adj} = 6.4$	$\text{adj} = 10.4$
c	d
$\text{adj} = 8.8$	$\text{adj} = 11.2$
e	f
$\text{adj} = 7.2$	$\text{adj} = 8.0$

5 Solve for the side indicated

$$\beta = 40^\circ$$

$$\text{opp} = 8.4$$

$$\text{adj} = ?$$

a	b
$\text{adj} = 6.0$	$\text{adj} = 13.0$
c	d
$\text{adj} = 11.0$	$\text{adj} = 7.0$
e	f
$\text{adj} = 10.0$	$\text{adj} = 9.0$

6 Solve for the side indicated

$$\alpha = 50^\circ$$

$$\text{hyp} = ?$$

$$\text{adj} = 5$$

a	b
$\text{hyp} = 7.0$	$\text{hyp} = 9.3$
c	d
$\text{hyp} = 5.4$	$\text{hyp} = 10.9$
e	f
$\text{hyp} = 4.7$	$\text{hyp} = 7.8$

7 Solve for the side indicated

$$\lambda = 40^\circ$$

$$\text{hyp} = 15.7$$

$$\text{adj} = ?$$

a	b
$\text{adj} = 14.4$	$\text{adj} = 8.4$
c	d
$\text{adj} = 7.2$	$\text{adj} = 12.0$
e	f
$\text{adj} = 16.8$	$\text{adj} = 9.6$