

| 16) From 25 feet away from the base of a building, <br> the angle of elevation from the ground to the top <br> of a building is measured to be $38^{\circ}$. How tall is the <br> building? |
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| 17) A kite is 35 feet in the air and the string forms <br> an angle of $62^{\circ}$ with the ground. How long is the <br> string? |
| $\qquad$18) If a 30-foot ramp forms an angle of 32 ${ }^{\circ}$ with <br> the ground, how high above the ground is the top <br> of the ramp? |
| 32 |


| 1. Find $\sin A$. 4. Find $\sin C$. |  |
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| 2. Find $\cos A$. <br> 5. Find $\cos C$. <br> 3. Find $\tan A$ <br> 6. Find $\tan C$. |  |
| 7. $\cos 40^{\circ}=\sin$ | 8. $\operatorname{Sin} 26^{\circ}=\cos$ |
| 9. If $\sin A=\frac{4}{5}$. Find $\tan A$. | 10. If $\cos B=\frac{5}{13}$. Find $\sin B$. |
| 11. | 12. |
| 13. Solve for $X$. | 14. Solve for X. |
| 15. Solve for $x$. | 16. Solve for $x$ and $y$. |

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1. Find $\sin A$.
2. Find $\cos A$.
3. Find $\tan A$.
4. Find $\sin B$.

5. Find $\cos B$.
6. $\triangle A B C$ is a right triangle. One of the acute angles is $38^{\circ}$. What is the cosine of the other acute angle?
7. For which value of $\theta$ is $\cos \theta=\sin 73^{\circ}$ ?
8. For which value of $\theta$ is $\sin \theta=\cos 64^{\circ}$ ?
9. Find $\overline{A B}, m \angle C$, and $b \angle A$.


| 11. A 12-foot ladder is placed against a wall. <br> The ladder is at an angle of $72.5^{\circ}$ to the level <br> ground. About how far up the wall will the top of <br> the ladder reach? | 12. You see a hiker sitting on a bench taking a <br> water break at the top of a hill at a $60^{\circ}$ angle of <br> elevation. Your eye level is 5 feet off the ground <br> and you are standing 100 meters from the base <br> of the hill. At what altitude is the hiker sitting on <br> the bench? |
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| 13. The height of a building is 75 meters. What <br> is the angle of elevation of the sun when the <br> building casts a shadow that is 60 meters long? | 14. An 8 foot ladder is leaning against a wall so <br> that the base is 5 feet from the base of the wall. <br> What angle does the ladder make with the <br> ground? |

17. Two buildings are 15 meters apart. The height of the shorter building is 22 meters. The angle of elevation from the roof of the shorter building to the roof of the taller building is $40^{\circ}$. What is the height of the taller building?

