

2COSACOSB FORMULA

For many students, trigonometry and its formulas, like the $2\cos\alpha\cos\beta$ formula, can become an academic hurdle that triggers frustration and apprehension. To help you overcome the trigonometry fear, EduLyte's mentors have created this resource and a free worksheet. Go ahead and benefit from the guidance of the best experts in mathematics!

[Read more](#)



Q1: What is the range of values for the $2\cos(\arccos(b))$ formula?

A: $[-1, 1]$

B: $(-\infty, \infty)$

C: $[0, \infty)$

D: $[1, \infty)$

Q2: Which of the following is equivalent to $2\cos(\arccos(b))$?

A: $\cos(b + a)$

B: $\sin(b + a)$

C: $\tan(b + a)$

D: $\sec(b + a)$

Q3: If $a = 45^\circ$ and $b = 30^\circ$, what is the value of $\cos(a) \cos(b)$ using the $2\cos(\arccos(b))$ formula?

A: $1/2$

B: $\sqrt{3}/2$

C: $3/2$

D: None of the above

Q4: Given that $a = 60^\circ$ and $b = 45^\circ$, what is the value of $2\cos(\arccos(b))$?

A: $\sqrt{2}/2$

B: $1/2$

C: $\sqrt{3}/2$

D: $2/\sqrt{2}$

Q5: Given that $a = 30^\circ$ and $b = 60^\circ$, what is the value of $2\cos(\arccos(b))$?

A: $1/2$

B: $\sqrt{3}/2$

C: $3/2$

D: 2

Q6: Given that $a = 45^\circ$ and $b = 30^\circ$, what is the value of $2\cos(\cos(b))$?

- A: $1/2$
 - B: $\sqrt{3}/2$
 - C: $3/2$
 - D: 2
-

Q7: If $a = 60^\circ$ and $b = 30^\circ$, what is the value of $2\cos(\cos(b))$?

- A: $\sqrt{3}/2$
 - B: $1/2$
 - C: $1/\sqrt{3}$
 - D: $2/\sqrt{3}$
-

Q8: If $a = 45^\circ$ and $b = 45^\circ$, what is the value of $2\cos(\cos(b))$?

- A: $1/2$
 - B: $\sqrt{2}/2$
 - C: $\sqrt{3}/2$
 - D: 1
-

Q9: If $a = 30^\circ$ and $b = 60^\circ$, what is the value of $2\cos(\cos(b))$?

- A: $1/2$
 - B: $\sqrt{3}/2$
 - C: $\sqrt{2}/2$
 - D: $\sqrt{6}/2$
-

Q10: In a right triangle, angle A is 30° , and the adjacent side is 4. Given that $\cos(B) = 3/5$, what is the value of $2\cos(\cos(B))$?

- A: $4/5$
 - B: $3/5$
 - C: $2/5$
 - D: $1/5$
-



Answers

Q1: A - $[-1, 1]$

Q2: A - $\cos(b + a)$

Q3: D - None of the above

Q4: A - $\sqrt{2}/2$

Q5: D - 2

Q6: A - $1/2$

Q7: B - $1/2$

Q8: B - $\sqrt{2}/2$

Q9: D - $\sqrt{6}/2$

Q10: B - $3/5$