Sum & Difference Formulas · 1

Use a sum or difference formula to find the exact value of cos(165°).

Sum & Difference Formulas · 2

Find the exact value: cos(5°)cos(25°) - sin(5°)sin(25°)

Sum & Difference Formulas · 3

A and B are acute angles with $\sin A = \frac{8}{17}$ and $\cos B = \frac{12}{13}$. Find the exact value of cos(A + B).

Sum & Difference Formulas · 4

Use a sum or difference formula to find the exact value of tan(75°).

Sum & Difference Formulas · 5

Find the exact value: sin(35°)cos(10°) + cos(35°)sin(10°)

Sum & Difference Formulas · 6

A and B are acute angles with $\sin A = \frac{5}{13}$ and $\cos B = \frac{4}{5}$. Find the exact value of sin(A + B).

Sum & Difference Formulas · 7

Use a sum or difference formula to find the exact value of cos(105°).

Sum & Difference Formulas · 8

Find the exact value: sin(125°)cos(65°) - cos(125°)sin(65°)

Sum & Difference Formulas · 2

ANSWER

$$\frac{\sqrt{3}}{2}$$

Sum & Difference Formulas · 1

ANSWER

$$-\frac{\sqrt{6}+\sqrt{2}}{4}$$

Sum & Difference Formulas · 4

ANSWER

$$2+\sqrt{3}$$

Sum & Difference Formulas · 3

ANSWER

$$\frac{140}{221}$$

Sum & Difference Formulas · 6

ANSWER

$$\frac{56}{65}$$

Sum & Difference Formulas · 5

ANSWER

$$\frac{\sqrt{2}}{2}$$

Sum & Difference Formulas · 8

ANSWER

$$\frac{\sqrt{3}}{2}$$

Sum & Difference Formulas · 7

ANSWER

$$\frac{\sqrt{2}-\sqrt{6}}{4}$$

Sum & Difference Formulas · 9

Use a sum or difference formula to find the exact value of sin(75°).

Sum & Difference Formulas · 10

Find the exact value: sin(70°)cos(25°) - cos(70°)sin(25°)

Sum & Difference Formulas · 11

A and B are acute angles with sin A = $\frac{7}{25}$ and cos B = $\frac{15}{17}$. Find the exact value of sin(A + B).

Sum & Difference Formulas · 12

Use a sum or difference formula to find the exact value of sin(165°).

Sum & Difference Formulas · 13

Find the exact value: sin(220°)cos(70°) - cos(220°)sin(70°)

Sum & Difference Formulas · 14

A and B are acute angles with sin A = $\frac{8}{17}$ and cos B = $\frac{24}{25}$. Find the exact value of cos(A + B).

Sum & Difference Formulas · 15

Use a sum or difference formula to find the exact value of tan(255°).

Sum & Difference Formulas · 16

Find the exact value: cos(130°)cos(70°) + sin(130°)sin(70°)

Sum & Difference Formulas · 10

ANSWER

$$\frac{\sqrt{2}}{2}$$

Sum & Difference Formulas · 9

ANSWER

$$\frac{\sqrt{6} + \sqrt{2}}{4}$$

Sum & Difference Formulas · 12

ANSWER

$$\frac{\sqrt{6} - \sqrt{2}}{4}$$

Sum & Difference Formulas · 11

ANSWER

$$\frac{297}{425}$$

Sum & Difference Formulas · 14

ANSWER

$$\frac{304}{425}$$

Sum & Difference Formulas · 13

ANSWER

$$\frac{1}{2}$$

Sum & Difference Formulas · 16

ANSWER

$$\frac{1}{2}$$

Sum & Difference Formulas · 15

ANSWER

$$2 + \sqrt{3}$$

Sum & Difference Formulas · 17

Use a sum or difference formula to find the exact value of $\sin(195°)$.

Sum & Difference Formulas · 18

Find the exact value: $\sin(20°)\cos(70°) + \cos(20°)\sin(70°)$

Sum & Difference Formulas · 19

A and B are acute angles with $\sin A = \frac{5}{13}$ and $\cos B = \frac{24}{25}$. Find the exact value of $\cos(A + B)$.

Sum & Difference Formulas · 20

Find the exact value: $\cos(85°)\cos(40°) + \sin(85°)\sin(40°)$

Sum & Difference Formulas · 21

A and B are acute angles with $\sin A = \frac{7}{25}$ and $\cos B = \frac{15}{17}$. Find the exact value of $\cos(A - B)$.

Sum & Difference Formulas · 22

Use a sum or difference formula to find the exact value of $\cos(15°)$.

Sum & Difference Formulas · 23

Find the exact value: $\cos(160°)\cos(25°) + \sin(160°)\sin(25°)$

Sum & Difference Formulas · 24

Use a sum or difference formula to find the exact value of $\sin(15°)$.

Sum & Difference Formulas · 18

ANSWER

$$1$$

Sum & Difference Formulas · 17

ANSWER

$$\frac{\sqrt{2} - \sqrt{6}}{4}$$

Sum & Difference Formulas · 20

ANSWER

$$\frac{\sqrt{2}}{2}$$

Sum & Difference Formulas · 19

ANSWER

$$\frac{253}{325}$$

Sum & Difference Formulas · 22

ANSWER

$$\frac{\sqrt{6} + \sqrt{2}}{4}$$

Sum & Difference Formulas · 21

ANSWER

$$\frac{416}{425}$$

Sum & Difference Formulas · 24

ANSWER

$$\frac{\sqrt{6} - \sqrt{2}}{4}$$

Sum & Difference Formulas · 23

ANSWER

$$\frac{\sqrt{2}}{-2}$$