Double-Angle Formulas · 1

$\sin\theta = -\frac{5}{13}$ and θ is in quadrant IV.

Find the exact value of $\cos 2\theta$.

Double-Angle Formulas · 2

$\cos\theta = -\frac{12}{13}$ and θ is in quadrant II.

Find the exact value of $\sin 2\theta$.

Double-Angle Formulas · 3

Find the exact value: $1 - 2\sin^2(105°)$

Double-Angle Formulas · 4

$\sin\theta = -\frac{12}{13}$ and θ is in quadrant III.

Find the exact value of $\tan 2\theta$.

Double-Angle Formulas · 5

$\sin\theta = -\frac{7}{25}$ and θ is in quadrant III.

Find the exact value of $\cos 2\theta$.

Double-Angle Formulas · 6

Find the exact value: $\cos^2(75°) - \sin^2(75°)$

Double-Angle Formulas · 7

$\sin\theta = -\frac{4}{5}$ and θ is in quadrant III.

Find the exact value of $\tan 2\theta$.

Double-Angle Formulas · 8

Find the exact value: $2\sin(165°)\cos(165°)$

Double-Angle Formulas · 2

ANSWER

$$\frac{120}{-169}$$

Double-Angle Formulas · 1

ANSWER

$$\frac{119}{169}$$

Double-Angle Formulas · 4

ANSWER

$$\frac{120}{-119}$$

Double-Angle Formulas · 3

ANSWER

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

Double-Angle Formulas · 6

ANSWER

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

Double-Angle Formulas · 5

ANSWER

$$\frac{527}{625}$$

Double-Angle Formulas · 8

ANSWER

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

Double-Angle Formulas · 7

ANSWER

$$\frac{24}{-7}$$

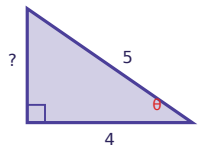
Double-Angle Formulas · 9

$\cos\theta = \frac{15}{17}$ and θ is in quadrant IV.

Find the exact value of $\sin 2\theta$.

Double-Angle Formulas · 10

$\cos\theta = \frac{4}{5}$ and θ is acute. Find the exact value of $\tan 2\theta$.



Double-Angle Formulas · 11

Find the exact value: $\cos^2(120°) - \sin^2(120°)$

Double-Angle Formulas · 12

$\cos\theta = -\frac{4}{5}$ and θ is in quadrant III.

Find the exact value of $\cos 2\theta$.

Double-Angle Formulas · 13

$\sin\theta = -\frac{3}{5}$ and θ is in quadrant IV.

Find the exact value of $\tan 2\theta$.

Double-Angle Formulas · 14

Find the exact value: $1 - 2\sin^2(67.5°)$

Double-Angle Formulas · 15

$\sin\theta = -\frac{3}{5}$ and θ is in quadrant III.

Find the exact value of $\tan 2\theta$.

Double-Angle Formulas · 16

Find the exact value: $2\cos^2(30°) - 1$

Double-Angle Formulas · 10

ANSWER

$$\frac{24}{7}$$

Double-Angle Formulas · 9

ANSWER

$$\frac{240}{-289}$$

Double-Angle Formulas · 12

ANSWER

$$\frac{7}{25}$$

Double-Angle Formulas · 11

ANSWER

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

Double-Angle Formulas · 14

ANSWER

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

Double-Angle Formulas · 13

ANSWER

$$\frac{24}{-7}$$

Double-Angle Formulas · 16

ANSWER

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

Double-Angle Formulas · 15

ANSWER

$$\frac{24}{7}$$

Double-Angle Formulas · 17

$\sin\theta = \frac{3}{5}$ and θ is in quadrant II. Find the exact value of cos 2θ.

Double-Angle Formulas · 18

$\cos\theta = \frac{8}{17}$ and θ is in quadrant IV. Find the exact value of cos 2θ.

Double-Angle Formulas · 19

$\sin\theta = -\frac{4}{5}$ and θ is in quadrant IV. Find the exact value of sin 2θ.

Double-Angle Formulas · 20

$\cos\theta = \frac{3}{5}$ and θ is in quadrant IV. Find the exact value of sin 2θ.

Double-Angle Formulas · 21

Find the exact value: $\cos^2(60°) - \sin^2(60°)$

Double-Angle Formulas · 22

Find the exact value: $1 - 2\sin^2(157.5°)$

Double-Angle Formulas · 23

$\sin\theta = -\frac{12}{13}$ and θ is in quadrant III. Find the exact value of cos 2θ.

Double-Angle Formulas · 24

$\sin\theta = \frac{8}{17}$ and θ is in quadrant II. Find the exact value of tan 2θ.

Double-Angle Formulas · 18

ANSWER

$$\frac{161}{-289}$$

Double-Angle Formulas · 17

ANSWER

$$\frac{7}{25}$$

Double-Angle Formulas · 20

ANSWER

$$\frac{24}{-25}$$

Double-Angle Formulas · 19

ANSWER

$$\frac{24}{-25}$$

Double-Angle Formulas · 22

ANSWER

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

Double-Angle Formulas · 21

ANSWER

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

Double-Angle Formulas · 24

ANSWER

$$\frac{240}{-161}$$

Double-Angle Formulas · 23

ANSWER

$$\frac{119}{-169}$$