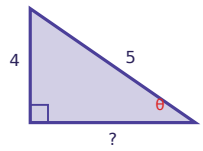
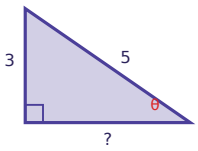
Double-Angle Formulas · 1

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



Double-Angle Formulas · 2

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



Double-Angle Formulas · 3

Find the exact value: $2\tan(165°) / (1 - \tan^2(165°))$

Double-Angle Formulas · 4

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

Find the exact value of cos 2θ.

Double-Angle Formulas · 5

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

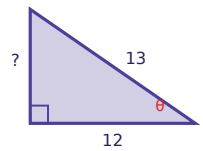
Find the exact value of tan 2θ.

Double-Angle Formulas · 6

Find the exact value: $2\cos^2(22.5°) - 1$

Double-Angle Formulas · 7

$\cos\theta = \frac{12}{13}$ and θ is acute. Find the exact value of cos 2θ.



Double-Angle Formulas · 8

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

Double-Angle Formulas · 2

ANSWER

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

Double-Angle Formulas · 1

ANSWER

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

Double-Angle Formulas · 4

ANSWER

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

Double-Angle Formulas · 3

ANSWER

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

Double-Angle Formulas · 6

ANSWER

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

Double-Angle Formulas · 5

ANSWER

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

Double-Angle Formulas · 8

ANSWER

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

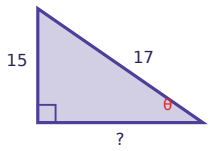
Double-Angle Formulas · 7

ANSWER

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

Double-Angle Formulas · 9

$\sin\theta = \frac{15}{17}$ and θ is acute. Find the exact value of cos 2θ.



Double-Angle Formulas · 10

$\cos\theta = -\frac{15}{17}$ and θ is in quadrant II. Find the exact value of tan 2θ.

Double-Angle Formulas · 11

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

Double-Angle Formulas · 12

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

Double-Angle Formulas · 13

Find the exact value: $2\cos^2(165°) - 1$

Double-Angle Formulas · 14

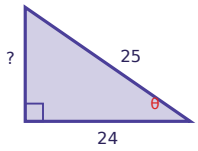
$\sin\theta = -\frac{5}{13}$ and θ is in quadrant III. Find the exact value of sin 2θ.

Double-Angle Formulas · 15

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

Double-Angle Formulas · 16

$\cos\theta = \frac{24}{25}$ and θ is acute. Find the exact value of tan 2θ.



Double-Angle Formulas · 10

ANSWER

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

Double-Angle Formulas · 9

ANSWER

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

Double-Angle Formulas · 12

ANSWER

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

Double-Angle Formulas · 11

ANSWER

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

Double-Angle Formulas · 14

ANSWER

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

Double-Angle Formulas · 13

ANSWER

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

Double-Angle Formulas · 16

ANSWER

$$\frac{336}{527}$$

Double-Angle Formulas · 15

ANSWER

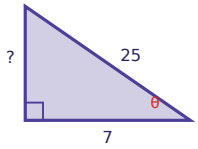
$$\frac{\sqrt{3}}{3}$$

Double-Angle Formulas · 17

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

Double-Angle Formulas · 18

$\cos\theta = \frac{7}{25}$ and θ is acute. Find the exact value of cos 2θ.



Double-Angle Formulas · 19

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

Double-Angle Formulas · 20

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

Double-Angle Formulas · 21

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

Double-Angle Formulas · 22

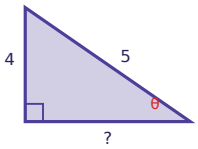
Find the exact value: $2\cos^2(30°) - 1$

Double-Angle Formulas · 23

Find the exact value: $2\sin(30°)\cos(30°)$

Double-Angle Formulas · 24

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



Double-Angle Formulas · 18

ANSWER

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

Double-Angle Formulas · 17

ANSWER

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

Double-Angle Formulas · 20

ANSWER

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

Double-Angle Formulas · 19

ANSWER

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

Double-Angle Formulas · 22

ANSWER

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

Double-Angle Formulas · 21

ANSWER

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

Double-Angle Formulas · 24

ANSWER

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

Double-Angle Formulas · 23

ANSWER

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