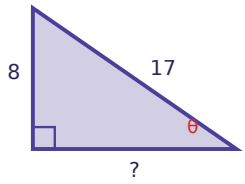
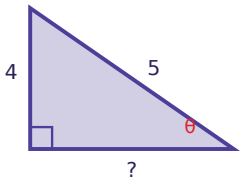
Task card 1 Double-Angle Formulas

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



Task card 2 Double-Angle Formulas

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



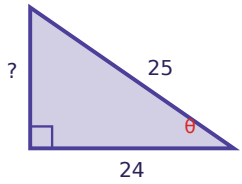
Task card 3 Double-Angle Formulas

Find the exact value:

$\cos^2(67.5°) - \sin^2(67.5°)$

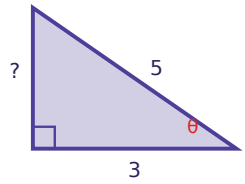
Task card 4 Double-Angle Formulas

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



Task card 5 Double-Angle Formulas

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



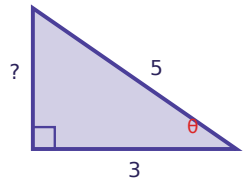
Task card 6 Double-Angle Formulas

Find the exact value:

$\cos^2(22.5°) - \sin^2(22.5°)$

Task card 7 Double-Angle Formulas

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



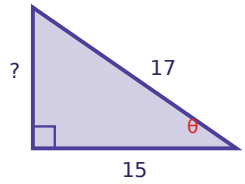
Task card 8 Double-Angle Formulas

Find the exact value:

$2\sin(15°)\cos(15°)$

Task card 9 Double-Angle Formulas

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



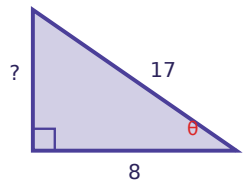
Task card 10 Double-Angle Formulas

Find the exact value:

$2\sin(30°)\cos(30°)$

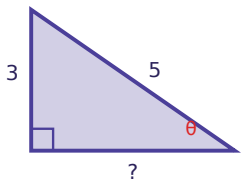
Task card 11 Double-Angle Formulas

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



Task card 12 Double-Angle Formulas

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



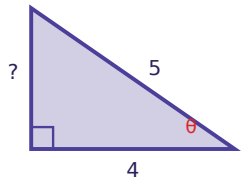
Task card 13 Double-Angle Formulas

Find the exact value:

$2\sin(22.5°)\cos(22.5°)$

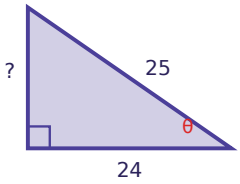
Task card 14 Double-Angle Formulas

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



Task card 15 Double-Angle Formulas

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



Task card 16 Double-Angle Formulas

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

Task card 17 Double-Angle Formulas

Find the exact value:

$2\sin(67.5°)\cos(67.5°)$

Task card 18 Double-Angle Formulas

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

Task card 19 Double-Angle Formulas

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

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

Task card 20 Double-Angle Formulas

Find the exact value:

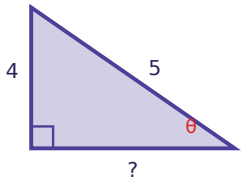
$\cos^2(30°) - \sin^2(30°)$

Task card 21 Double-Angle Formulas

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

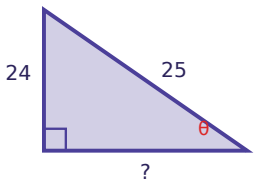
Task card 22 Double-Angle Formulas

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



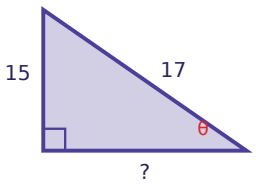
Task card 23 Double-Angle Formulas

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



Task card 24 Double-Angle Formulas

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



Double-Angle Formulas Task Cards

Recording sheet · Grade 12 · Give exact answers: fractions in simplest form, or radicals like √3/2.

Name: _____ Date: _____

Scan to check your answers

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Double-Angle Formulas Task Cards: Answer Key

Grade 12 · Easy

The answers online

1. $\frac{161}{289}$

2. $\frac{24}{25}$

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

4. $\frac{336}{625}$

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

6. $\frac{\sqrt{2}}{2}$

7. $\frac{24}{25}$

8. $\frac{1}{2}$

9. $\frac{161}{289}$

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

11. $\frac{240}{289}$

12. $\frac{7}{25}$

13. $\frac{\sqrt{2}}{2}$

14. $\frac{24}{25}$

15. $\frac{527}{625}$

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

17. $\frac{\sqrt{2}}{2}$

18. $\frac{527}{625}$

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

20. $\frac{1}{2}$

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

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

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

24. $\frac{240}{289}$