Name_____

Date_____ Period____

Use a double-angle identity to find the exact value of each expression.

1) $\cos\theta = \frac{4}{5}$ and $270° < \theta < 360°$
Find $\tan 2\theta$

2) $\cos\theta = \frac{15}{17}$ and $270° < \theta < 360°$
Find $\sin 2\theta$

3) $\sin\theta = \frac{3}{7}$ and $90° < \theta < 180°$
Find $\cos 2\theta$

4) $\tan\theta = \frac{3}{4}$ and $0° < \theta < 90°$
Find $\sin 2\theta$

5) $\sin\theta = \frac{2\sqrt{13}}{13}$ and $90° < \theta < 180°$
Find $\tan 2\theta$

6) $\sin\theta = \frac{7}{25}$ and $90° < \theta < 180°$
Find $\cos 2\theta$

7) $\cos\theta = \frac{2}{9}$ and $0° < \theta < 90°$
Find $\sin 2\theta$

8) $\sin\theta = \frac{8}{17}$ and $0° < \theta < 90°$
Find $\tan 2\theta$

9) $\tan\theta = -4$ and $90° < \theta < 180°$
Find $\tan 2\theta$

10) $\tan\theta = -\frac{3}{4}$ and $270° < \theta < 360°$
Find $\tan 2\theta$

11) $\cos\theta = -\frac{15}{17}$ and $180° < \theta < 270°$
Find $\sin 2\theta$

12) $\sin\theta = -\frac{3\sqrt{5}}{10}$ and $270° < \theta < 360°$
Find $\sin 2\theta$

13) $\sin\theta = \frac{4\sqrt{3}}{7}$ and $0° < \theta < 90°$
Find $\cos 2\theta$

14) $\tan\theta = -\frac{3}{4}$ and $90° < \theta < 180°$
Find $\sin 2\theta$

15) $\cos\theta = -\frac{\sqrt{205}}{23}$ and $180° < \theta < 270°$
Find $\cos 2\theta$

16) $\sin\theta = \frac{7}{25}$ and $0° < \theta < 90°$
Find $\cos 2\theta$

17) $\sin\theta = -\frac{5}{13}$ and $270° < \theta < 360°$
Find $\sin 2\theta$

18) $\sin\theta = \frac{3}{5}$ and $90° < \theta < 180°$
Find $\cos 2\theta$

19) $\sin\theta = -\frac{8}{17}$ and $180° < \theta < 270°$
Find $\sin 2\theta$

20) $\sin\theta = -\frac{3}{5}$ and $270° < \theta < 360°$
Find $\cos 2\theta$