Precalculus - Trig., Logarithms, Etc. Name_____

Practice for Semester 1 Exam

Date_____ Period____

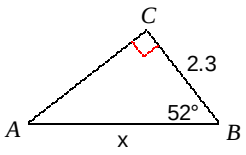
Find the exact value of the trig function indicated.

1) Find $\sin q$ if $\cos q = \frac{7}{25}$

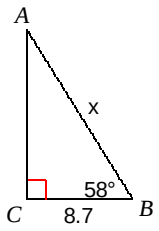
2) Find $\cos q$ if $\sin q = \frac{4}{5}$

Find the measure of each side indicated. Round to the nearest tenth.

3)

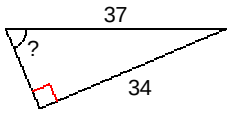


4)

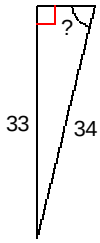


Find the measure of the indicated angle to the nearest degree.

5)

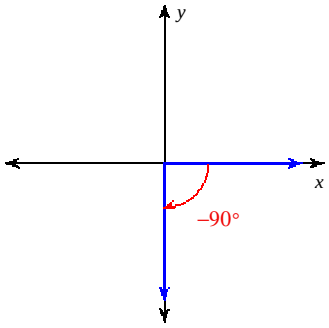


6)

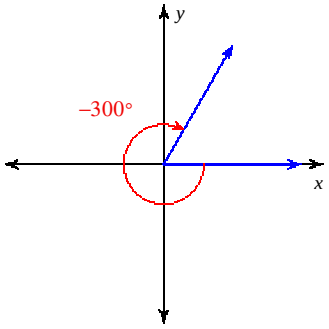


Find the exact value of each trigonometric function.

7) $\sin q$



8) $\cos q$



Expand each logarithm using the "rules for logarithms."

9) $\log_6 (8 \cdot 3^5)$

10) $\log_6 (5 \cdot 2 \cdot 11)$

Condense each expression to a single logarithm using the "rules for logarithms."

11) $3 \log_4 x$

12) $\log_5 a + \log_5 b + \log_5 c$

Solve each equation.

13) $\log (2m + 8) = \log 3m$

14) $e^{5r} = 57$

Answers to Practice for Semester 1 Exam

1) $\frac{24}{25}$

2) $\frac{3}{5}$

3) 3.8

4) 16.5

5) 67°

6) 76°

7) -1

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

9) $\log_6 8 + 5\log_6 3$

10) $\log_6 5 + \log_6 2 + \log_6 11$

11) $\log_4 |x^3|$

12) $\log_5 cba$

13) $\{8\}$

14) 0.8086