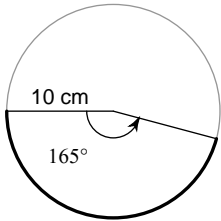


CRT REVIEW #3 / FINAL PRACTICE TEST

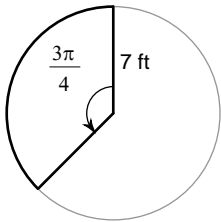
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Find the length of each arc.

1)

**Find the area of each sector.**

2)

**Convert each degree measure into radians.**

3) 285°

4) 50°

Convert each radian measure into degrees.

5) $\frac{34\pi}{9}$

6) $\frac{4\pi}{3}$

Find each angle measure.

7) $\sin X = \frac{2}{3}$ give X in degrees.

8) $\tan Y = 2$ give Y in radians

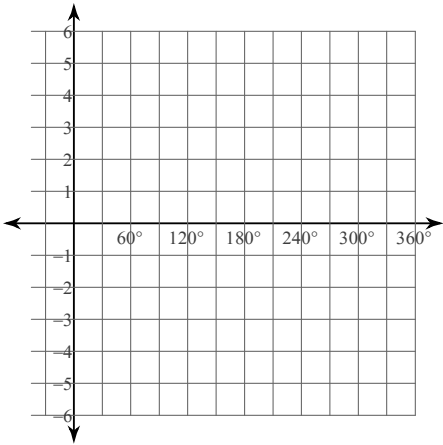
Find the value of the trig function indicated.

9) Find $\sin \theta$ if $\cot \theta = \frac{3}{4}$ in Quadrant III

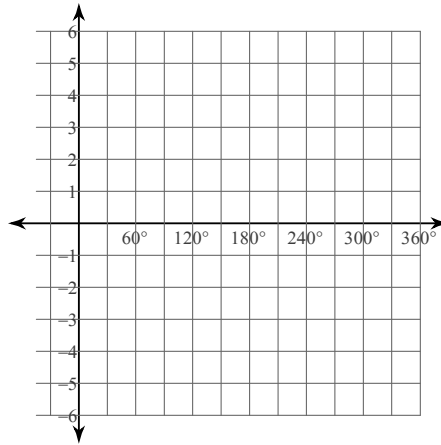
10) Find $\cos \theta$ if $\sin \theta = \frac{12}{13}$ in Quadrant II

Graph each function using degrees. (These won't be on the final but are on the CRT)

11) $y = 3\sin 4\theta$



12) $y = 2\sin 3\theta$



Find the exact value of each trigonometric function.

13) $\cos 330^\circ$

14) $\sec -150^\circ$

15) $\sin -\frac{5\pi}{6}$

16) $\tan \frac{3\pi}{4}$

Using the data set {1, 3, 4, 5, 7}

16. Find the standard deviation

17. Find the range

18. What percentile is 5?

Find each probability.

19. ${}_9P_4$

20. ${}_6C_4$

21. How different license plates can be made with 3 letters and 3 numbers if you can use them more than once?..... if you cannot repeat any numbers or letters?

Determine whether the situation is a combination or permutation. Then find the number of possibilities

22. Seating 8 students in the front row of the school auditorium

Type: _____

Possibilities: _____

23. Introducing the 5 starting players on the Orem High basketball team that has 12 players on it.

Type: _____

Possibilities: _____

24. Checking out 3 library books from a list of 8 books for a research project

Type: _____

Possibilities: _____

25. The first, second and third place finishers of a race with 15 contestants

Type: _____

Possibilities: _____

One bag of candy contains 15 red candies, 9 yellow candies and 6 green candies. Find the probability of each event.

26. P(picking a red candy)

27. P(not picking a yellow candy)

28. What is the probability of choosing 2 candies without replacement and getting a yellow candy and a green candy?

29. What is the probability of choosing 2 candies with replacement and getting a yellow candy and a red candy?

30. The histogram below shows how many students lie in each range of numbers there are 100 students total.

a) Which bar contains the 25th percentile? b) Which contains the 40th percentile? c) Which contains the Median?

