

Home Instruction Packet for Pre-Calculus CP

Mrs. Clausi

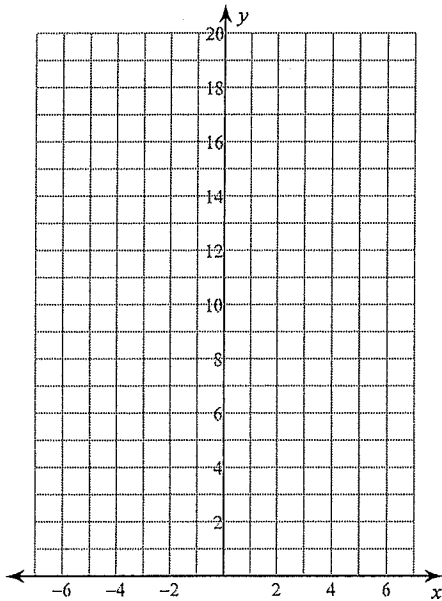
<p>In this packet are materials and directions.....</p> <p>Your answers must be emailed to me on a weekly basis. See schedule below. All of your work must be shown in your packet. I will be collecting your packet once school has resumed. This work will be graded and counted towards your marking period grade.</p>	
<p>I am available to support you during the hours 7:50 am-2:50 pm to answer any of your questions. I will be responding to your emails within the hour.</p> <p>You contact me at: jclausi@rpsd.org or through Remind</p>	
<p>Lesson: Pre-Calculus Review</p> <p>Students will complete a review packet of Pre-Calculus concepts, showing all work, and submitting final answers by email/remind weekly.</p>	<p>Directions for packet: Answer all questions. Show all work in your packet.</p> <p>Directions for emailing answers:</p> <ol style="list-style-type: none"> 1. Email me your answers for the week according to the schedule below. Take note of due dates and due times. 2. You may type out your final answers in the email OR email me a picture of the page(s) with your work and answers.
<p>Week 1-</p> <p>Lesson 1:</p> <p>Lesson 2:</p>	<p>Pages 1-3 Due: Friday, March 20th by 3:00 pm</p> <p>-Complete the problems and submit answers to pages 1 – 3 in packet #1-30</p>
<p>Week 2-</p> <p>Lesson 1:</p> <p>Lesson 2:</p>	<p>Pages 4-6 Due: Friday, March 27th by 3:00 pm</p> <p>- Complete problems and submit answers to pages 4 -6 in the packet. - #31-82</p>
<p>Week 3-</p> <p>Lesson 1:</p> <p>Lesson 2:</p>	<p>Pages 7-10 Due Friday, April 3rd by 3:00 pm</p> <p>-Complete problems and submit answers to pages 7-10 in the packet. #83-128</p>

Home Instruction Packet

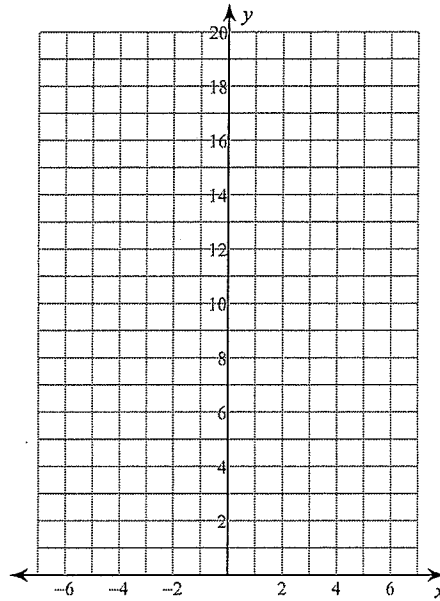
Date _____ Period _____

Sketch the graph of each function.

1) $y = \frac{1}{3} \cdot 3^x$



2) $y = 2 \cdot \left(\frac{1}{2}\right)^x$



Solve each equation.

3) $6^{2n-2} = 6^{3n}$

4) $\left(\frac{1}{4}\right)^{3a} = 64^{-3a+2}$

5) $3^{-r} = 27$

6) $36^{3x} = 6^3$

7) $64^{-2m-3} = 4^2$

8) $2^{-x} = 16$

$$9) 10^{-3n-1} = 1000$$

$$10) 4^{-v} = 64$$

Evaluate each expression.

$$11) \log_7 \frac{1}{343}$$

$$12) \log_5 25$$

$$13) \log_4 \frac{1}{64}$$

$$14) \log_7 343$$

$$15) \log_4 16$$

$$16) \log_2 4$$

$$17) \log_3 81$$

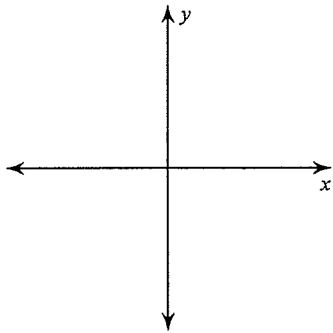
$$18) \log_7 49$$

$$19) \log_3 243$$

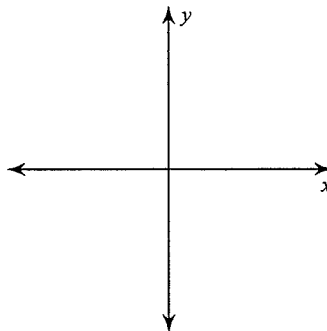
$$20) \log_6 216$$

Draw an angle with the given measure in standard position.

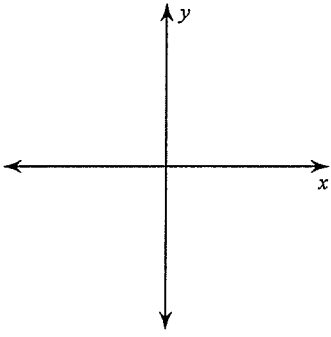
$$21) 55^\circ$$



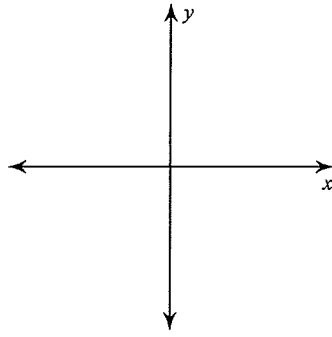
$$22) -\frac{\pi}{9}$$



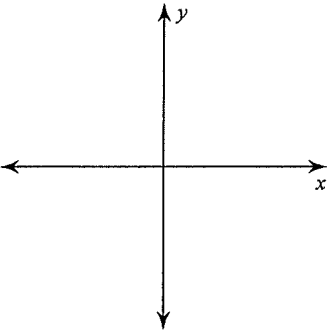
23) $-\frac{7\pi}{3}$



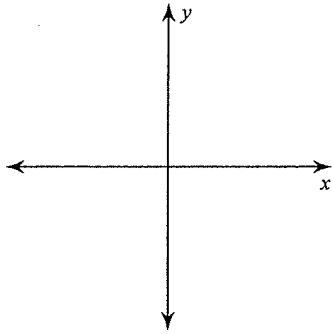
24) -390°



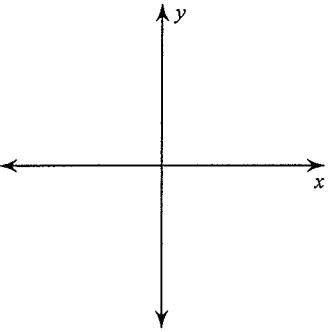
25) -230°



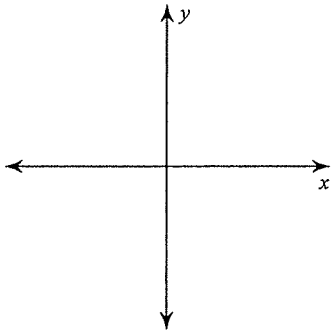
26) 590°



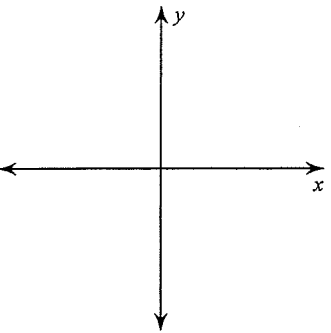
27) 400°



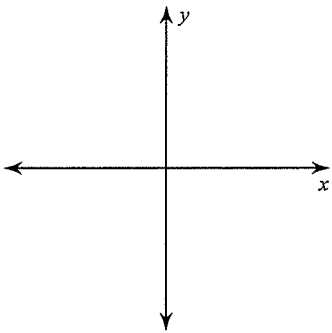
28) $\frac{\pi}{3}$



29) -20°



30) -5°



State the quadrant in which the terminal side of each angle lies.

31) -660°

32) $\frac{5\pi}{18}$

33) -490°

34) $-\frac{10\pi}{3}$

35) 330°

36) $-\frac{31\pi}{18}$

37) 340°

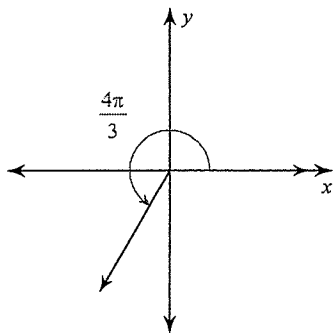
38) 125°

39) $-\frac{59\pi}{18}$

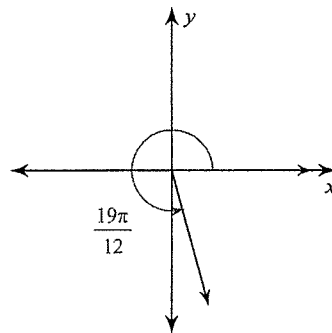
40) -300°

Find the reference angle.

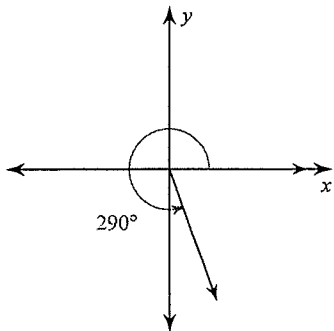
41)



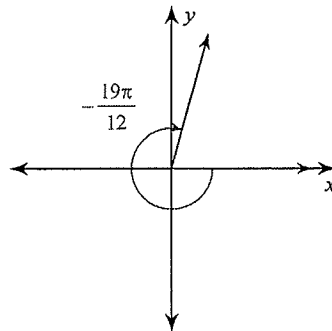
42)



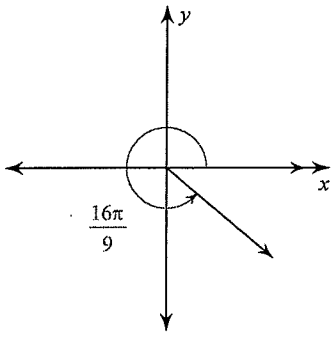
43)



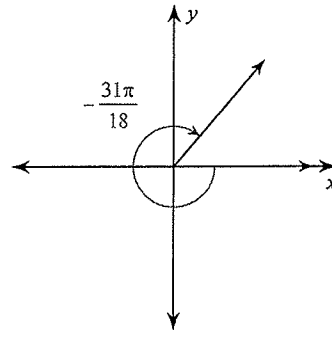
44)



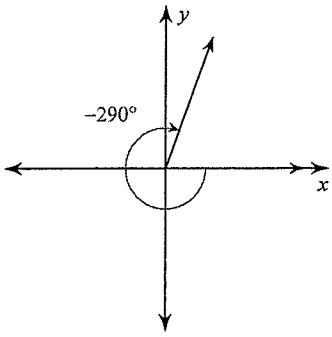
45)



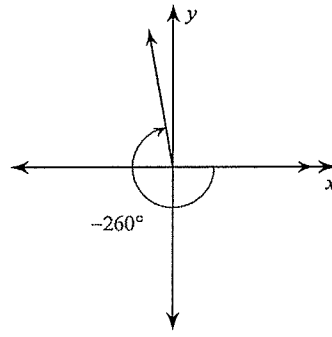
46)



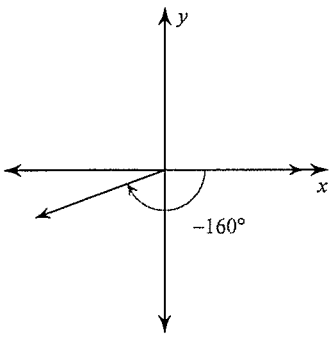
47)



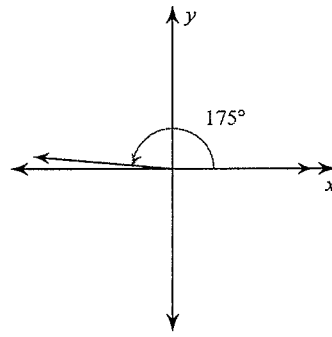
48)



49)



50)



Convert each degree measure into radians.

51) 20°

52) 315°

53) 300°

54) -390°

55) 980°

56) 255°

57) -140°

58) 30°

59) 340°

60) 100°

Convert each radian measure into degrees.

61) $\frac{10\pi}{9}$

62) $-\frac{\pi}{6}$

63) $\frac{\pi}{6}$

64) $\frac{5\pi}{6}$

65) $\frac{7\pi}{3}$

66) $-\frac{5\pi}{3}$

67) $-\frac{2\pi}{3}$

68) $\frac{17\pi}{12}$

69) $\frac{5\pi}{3}$

70) $-\frac{7\pi}{6}$

Find a positive and a negative coterminal angle for each given angle.

71) -350°

72) -295°

73) -110°

74) -435°

75) $-\frac{47\pi}{45}$

76) $\frac{19\pi}{12}$

77) $-\frac{59\pi}{36}$

78) $\frac{49\pi}{36}$

State if the given angles are coterminal.

79) $0^\circ, 360^\circ$

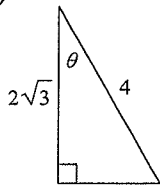
80) $295^\circ, -65^\circ$

81) $355^\circ, 715^\circ$

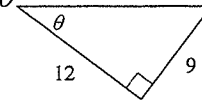
82) $350^\circ, -710^\circ$

Find the value of the trig function indicated. Write your answer as a simplified fraction.

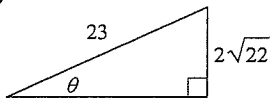
83) $\tan \theta$



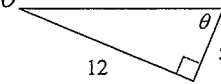
84) $\sin \theta$



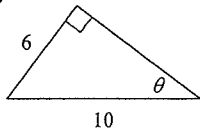
85) $\cot \theta$



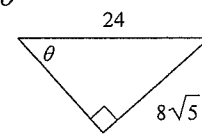
86) $\sec \theta$



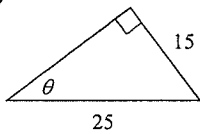
87) $\sec \theta$



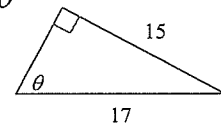
88) $\sec \theta$



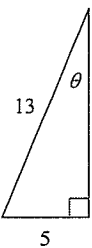
89) $\sec \theta$



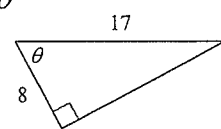
90) $\cot \theta$



91) $\sin \theta$

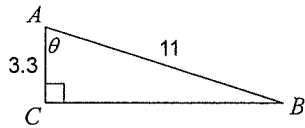


92) $\tan \theta$

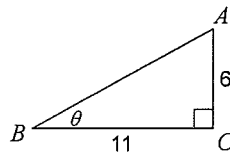


Find the measure of each angle indicated. Round to the nearest tenth.

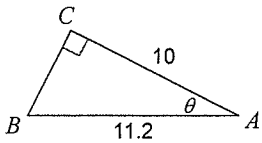
93)



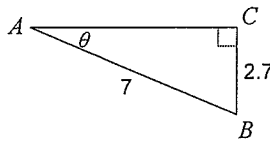
94)



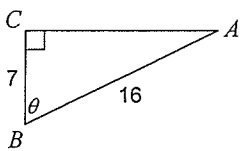
95)



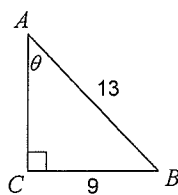
96)



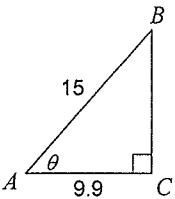
97)



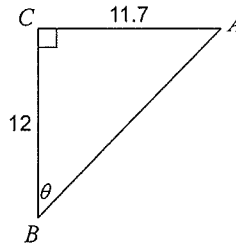
98)



99)

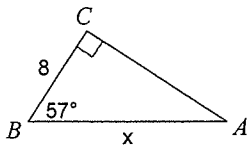


100)

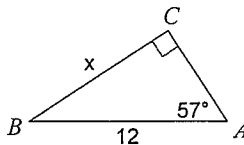


Find the measure of each side indicated. Round to the nearest tenth.

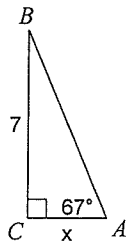
101)



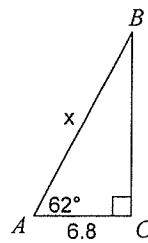
102)



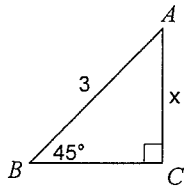
103)



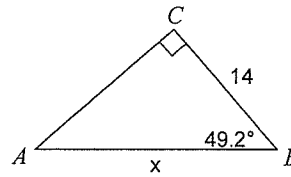
104)



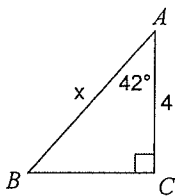
105)



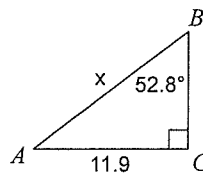
106)



107)



108)



Find the exact value of each trigonometric function. Hint: draw the angle and use a right triangle or the unit circle.

109) $\sec -\frac{2\pi}{3}$

110) $\csc 660^\circ$

111) $\sin -810^\circ$

112) $\tan 150^\circ$

113) $\cot -\frac{19\pi}{4}$

114) $\sec \frac{17\pi}{4}$

$$115) \cos -660^\circ$$

$$116) \tan \frac{23\pi}{6}$$

$$117) \sin 720^\circ$$

$$118) \cot 270^\circ$$

$$119) \tan 0^\circ$$

$$120) \tan 450^\circ$$

$$121) \cot \frac{3\pi}{4}$$

$$122) \tan -\frac{\pi}{6}$$

$$123) \tan -1020^\circ$$

$$124) \csc 690^\circ$$

$$125) \csc -\frac{11\pi}{2}$$

$$126) \csc -\frac{11\pi}{4}$$

$$127) \sin 150^\circ$$

$$128) \csc -\frac{29\pi}{6}$$