Precalculus

Chapter P Test Review

Name_____

No graphing calculator for questions 1 – 6!!

1. Find the distance between the points (−8, 5) and (3, 2)...leave answer in radical form if needed.

1. _____

2. Solve: $3(x + 2) = 5(2x - 3) - 7$

2. _____

3. Solve: $-1 < 4x - 1 \leq 11$
Write your solution in interval notation and graph it on the number line provided.

3. _____

4. Solve: $|2x + 3| \geq 1$
Write your solution in interval notation.

4. _____

5. Solve: $6x^2 - 4x + 5 = 0$

5. _____

6. Write the complex number in standard form. $\dfrac{7 + 4i}{4 - 3i}$

6. _____

7. Find the equation of a line that contains (3, 4) and has a slope of 2.
Write the equation in point-slope form. 7. _____

8. Find the equation of a line that has x-int of 2 and y-int of -7.
Write the equation in slope-intercept form. 8. _____

9. Find the equation of a line that passes through (10, -3) and whose graph is perpendicular to the graph $y = 5x - 2$.
Write the equation in slope-intercept form. 9. _____

10. Write the equation of the line that passes through the points (4, -10) and (-1, 5).
Write the equation in slope-intercept form. 10. _____

11. In standard form, write the equation of a circle with center (2, -6) and radius 9. 11. _____

12. Solve graphically: $4x^3 - 2x^2 - 4x - 1 = 0$ 12. _____

13. Solve graphically: $x^2 - x - 6 \leq 0$
Express your solution in interval notation. 13. _____

$(1+i)+(3-7i)$