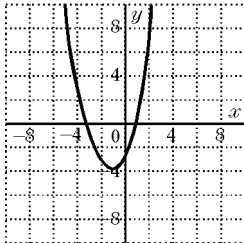


MATH 12
POLYNOMIAL INEQUALITIES

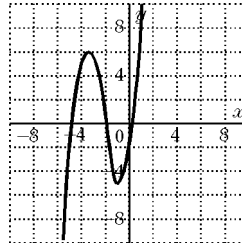
Name _____

Date _____

1. Use the graph to solve the inequality $x^2 + 2x - 3 < 0$



2. Use the graph to solve the inequality $x^3 + 7x^2 + 10x \geq 0$



3. Solve the inequality $(a - 2)(a + 4) > 0$

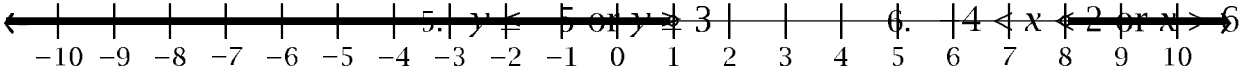
4. Which graph represents the solution for $x^2 - 9x + 8 > 0$?

5. Solve the inequality $15 - 2y - y^2 \leq 0$

6. Solve the inequality:
 $(x + 4)(x - 2)(x - 6) > 0$

7. Solve the inequality: $x^3 - 13x - 12 \leq 0$
8. Solve the inequality:
 $x^4 + 8x^3 + 15x^2 - 4x - 20 < 0$
9. Solve the inequality:
 $x^4 - 10x^3 + 27x^2 - 2x - 40 \geq 0$
10. Solve the inequality:
 $x^3 + x^2 - 10x + 8 \geq 0$

Answer List

1. $-3 < x < 1$ 2. $-5 \leq x \leq -2$ or $x \geq 0$ 3. $a < -4$ or $a > 2$
4.  5. $|y| \leq 5$ or $|y| \geq 3$ 6. $|4 < x < 2$ or $x > 6$
7. $x \leq -3$ or $-1 \leq x \leq 4$ 8. $-5 < x < -2$ or $-2 < x < 1$ 9. $x \leq -1$ or $2 \leq x \leq 4$ or $x \geq 5$
10. $-4 \leq x \leq 1$ or $x \geq 2$

Catalog List

- | | | |
|---------------|--------------|--------------|
| 1. AW2 DE 1 | 2. AW2 DE 5 | 3. AW2 DE 9 |
| 4. AW2 DE 13 | 5. AW2 DE 17 | 6. AW2 DE 33 |
| 7. AW2 DE 37 | 8. AW2 DE 41 | 9. AW2 DE 43 |
| 10. AW2 DE 40 | | |