



11+ School Entrance Prep Math Worksheet

Algebra: Quadratic Inequality (Easy)

Solve: Solve the following quadratic inequality.

1. $12x^2 + 19x + 5 \leq 0$
2. $8x^2 + 26x + 15 \geq 0$
3. $12x^2 + 17x + 6 \leq 0$
4. $12x^2 + 28x + 16 \leq 0$
5. $20x^2 + 14x + 2 > 0$
6. $4x^2 + 8x + 4 < 0$
7. $10x^2 + 30x + 20 < 0$
8. $x^2 + 9x + 20 \geq 0$
9. $12x^2 + 19x + 4 \leq 0$
10. $16x^2 + 20x + 6 > 0$
11. $3x^2 + 10x + 8 > 0$
12. $6x^2 + 18x + 12 \leq 0$
13. $10x^2 + 9x + 2 \leq 0$
14. $12x^2 + 25x + 12 \leq 0$
15. $4x^2 + 10x + 4 > 0$
16. $4x^2 + 18x + 8 > 0$
17. $4x^2 + 10x + 6 > 0$
18. $4x^2 + 8x + 3 \leq 0$
19. $6x^2 + 10x + 4 > 0$
20. $15x^2 + 18x + 3 \geq 0$

Answer Key

1. $(-5/4 \leq x) \text{ and } (x \leq -1/3)$
2. $((-3/4 \leq x) \text{ and } (x < \infty)) \text{ or } ((x \leq -5/2) \text{ and } (-\infty < x))$
3. $(-3/4 \leq x) \text{ and } (x \leq -2/3)$
4. $(-4/3 \leq x) \text{ and } (x \leq -1)$
5. $((-\infty < x) \text{ and } (x < -1/2)) \text{ or } ((-1/5 < x) \text{ and } (x < \infty))$
6. *False*
7. $(-2 < x) \text{ and } (x < -1)$
8. $((-4 \leq x) \text{ and } (x < \infty)) \text{ or } ((x \leq -5) \text{ and } (-\infty < x))$
9. $(-4/3 \leq x) \text{ and } (x \leq -1/4)$
10. $((-\infty < x) \text{ and } (x < -3/4)) \text{ or } ((-1/2 < x) \text{ and } (x < \infty))$
11. $((-\infty < x) \text{ and } (x < -2)) \text{ or } ((-4/3 < x) \text{ and } (x < \infty))$
12. $(-2 \leq x) \text{ and } (x \leq -1)$
13. $(-1/2 \leq x) \text{ and } (x \leq -2/5)$
14. $(-4/3 \leq x) \text{ and } (x \leq -3/4)$
15. $((-\infty < x) \text{ and } (x < -2)) \text{ or } ((-1/2 < x) \text{ and } (x < \infty))$
16. $((-\infty < x) \text{ and } (x < -4)) \text{ or } ((-1/2 < x) \text{ and } (x < \infty))$
17. $((-\infty < x) \text{ and } (x < -3/2)) \text{ or } ((-1 < x) \text{ and } (x < \infty))$
18. $(-3/2 \leq x) \text{ and } (x \leq -1/2)$
19. $((-\infty < x) \text{ and } (x < -1)) \text{ or } ((-2/3 < x) \text{ and } (x < \infty))$
20. $((-1/5 \leq x) \text{ and } (x < \infty)) \text{ or } ((x \leq -1) \text{ and } (-\infty < x))$