

Additional Review for Graph, Factor, Solve & Complex Numbers Test

Solve.

1. $16x^2 + 25 = 40x$

2. $-3x^2 = -3x$

3. $2x^2 + 3 = -13$

4. $x^2 - 8x + 16 = 0$

5. $2x^2 + 3x + 1 = 0$

6. $3x^2 = -4x + 15$

7. $2x^2 = -200$

8. $5x^2 - 2 = 13$

9. $4(x + 6)^2 = 160$

10. $-(x - 1)^2 + 7 = -43$

11. Write $y = 2x^2 - 12x + 16$ in intercept form. Find the zeros.

12. Write $y = 2(x + 1)^2 - 4$ in standard form. Identify the vertex.

Answers:

1. $\frac{5}{4}$

2. 0, 1

3. $\pm 2i\sqrt{2}$

4. 4

5. $-\frac{1}{2}, -1$

6. $-3, \frac{5}{3}$

7. $\pm 10i$

8. $\pm\sqrt{3}$

9. $-6 \pm 2\sqrt{10}$

10. $1 \pm 5\sqrt{2}$

11. $y = 2(x - 4)(x - 2)$; $x = 2, 4$

12. $y = 2x^2 + 4x - 2$; vertex: $(-1, -4)$