

4.4 Practice Day 1

Solve each equation by taking square roots.

1) $-2k^2 = -6$

2) $v^2 - 4 = 0$

3) $b^2 - 4 = 51$

4) $-3n^2 = -48$

5) $x^2 + 6 = 15$

6) $2n^2 = 18$

7) $7n^2 = 175$

8) $4b^2 = 244$

9) $-8x^2 = -472$

10) $x^2 + 6 = 23$

11) $3k^2 + 8 = 95$

12) $8r^2 + 5 = -4$

$$13) 10k^2 - 9 = 891$$

$$14) 3 - 6x^2 = -46$$

$$15) 4n^2 + 9 = 25$$

$$16) 5n^2 + 9 = 489$$

$$17) 25b^2 - 3 = 97$$

$$18) 7p^2 - 4 = -7$$

$$19) 4x^2 + 6 = -13$$

$$20) 10x^2 + 1 = 21$$

Simplify.

$$21) (-6i) + (5i) + (-7 - 6i)$$

$$22) (-1 - 3i) + (5 + 6i)$$

$$23) (5 - 7i) + (6i) - 6$$

$$24) (3 + 4i) - (-7 + 8i)$$

$$25) (-7i) + (4 + 7i) + (8i)$$

$$26) 4 - 8 - (4 - 7i)$$

$$27) 8(1 - 4i)$$

$$28) (2i)(-2 - 5i)$$

$$29) -6(-2i)$$

$$30) (-4i)(-3i)(7i)$$

$$31) (8i)(6 - i)$$

$$32) (4i)(-6i)$$

$$33) (4 - 6i)(-5 + 6i)$$

$$34) (1 + i)(5 + 3i)$$

$$35) (-1 - 3i)^2$$

$$36) (-7i)(-5i)(5 - 4i)$$

$$37) (3 - 6i)(5 - i)$$

$$38) (5 + 4i)^2$$

Answers to 4.4 Practice Day 1 (ID: 1)

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|-----------------------------------|------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------|
| 1) $\{\sqrt{3}, -\sqrt{3}\}$ | 2) $\{2, -2\}$ | 3) $\{\sqrt{55}, -\sqrt{55}\}$ | 4) $\{4, -4\}$ |
| 5) $\{3, -3\}$ | 6) $\{3, -3\}$ | 7) $\{5, -5\}$ | 8) $\{\sqrt{61}, -\sqrt{61}\}$ |
| 9) $\{\sqrt{59}, -\sqrt{59}\}$ | 10) $\{\sqrt{17}, -\sqrt{17}\}$ | 11) $\{\sqrt{29}, -\sqrt{29}\}$ | 12) $\left\{\frac{3i\sqrt{2}}{4}, -\frac{3i\sqrt{2}}{4}\right\}$ |
| 13) $\{3\sqrt{10}, -3\sqrt{10}\}$ | 14) $\left\{\frac{7\sqrt{6}}{6}, -\frac{7\sqrt{6}}{6}\right\}$ | 15) $\{2, -2\}$ | 16) $\{4\sqrt{6}, -4\sqrt{6}\}$ |
| 17) $\{2, -2\}$ | 18) $\left\{\frac{i\sqrt{21}}{7}, -\frac{i\sqrt{21}}{7}\right\}$ | 19) $\left\{\frac{i\sqrt{19}}{2}, -\frac{i\sqrt{19}}{2}\right\}$ | 20) $\{\sqrt{2}, -\sqrt{2}\}$ |
| 21) $-7 - 7i$ | 22) $4 + 3i$ | 23) $-1 - i$ | 24) $10 - 4i$ |
| 25) $4 + 8i$ | 26) $-8 + 7i$ | 27) $8 - 32i$ | 28) $10 - 4i$ |
| 29) $12i$ | 30) $-84i$ | 31) $8 + 48i$ | 32) 24 |
| 33) $16 + 54i$ | 34) $2 + 8i$ | 35) $-8 + 6i$ | 36) $-175 + 140i$ |
| 37) $9 - 33i$ | 38) $9 + 40i$ | | |