

Homework 32.1

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Solve each equation by completing the square.

1) $a^2 + 16a + 66 = 3$

2) $x^2 + 20x + 57 = -8$

3) $v^2 + 8v - 30 = 3$

4) $x^2 - 14x + 44 = -4$

Simplify. Your answer should contain only positive exponents.

5) $4u^{-3} \cdot 3u^{-4}v^2$

6) $4y^2 \cdot 3xy^{-2}$

7) $(v^4 \cdot vu^2 \cdot 2u^0v^2)^4$

8) $(x^0y^4 \cdot 2x^{-3})^4$

Answers to Homework 32.1

1) $\{-7, -9\}$

4) $\{8, 6\}$

8) $\frac{16y^{16}}{x^{12}}$

2) $\{-10 + \sqrt{35}, -10 - \sqrt{35}\}$

3) $\{3, -11\}$

5) $\frac{12v^2}{u^7}$

6) $12x$

7) $16v^{28}u^8$