

4.5 – Practice Solving Different Types of Equations

$x^2 + 20 = 45$	$52 = 3x - 8$	$x^3 = 125$
Match the terms below with the equations that they describe above.		
First-Degree Equation	Second-Degree Equation	Third-Degree Equations

Practice – a) Label each equation as first, second, or third degree. There will be one of each type in each row. b) Solve each equation and check.

LP#1 $x + 18 = 22$	$x^3 = 216$	$y^2 = 196$
LP#2 $m^3 = 8$	$x^2 = 25$	$6x = 42$

LP#3 $w^2 = 81$	$9(y + 3) = 9$	$d^3 = 1000$
LP#4 $x^2 + 1 = 10$	$x + 18 = 3x - 6$	$x^3 - 7 = 20$
LP#5 $2y - 4 = 7y - 19$	$w^3 + 3 = 128$	$x^2 - 10 = 6$

Review a) Label each equation as first, second, or third degree. There will be one of each type in each row. b) Solve each equation and check.

R#1 $x^2 = 9$	$y^3 = 64$	$y + 27 = 22$
R#2 $6(x + 1) = 7x + 2$	$n^2 + 12 = 16$	$x^3 = 27$
R#3 $x^3 - 5 = 3$	$3y + 18 = 6y + 24$	$x^2 = 121$

Homework

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|---------------------|-----------------------|---------------------|------------------------|
| 1) $x - 8 = 3$ | 2) $d^3 = 216$ | 3) $5m + 19 = 9$ | 4) $x^2 = 49$ |
| 5) $b^3 = 27$ | 6) $8m + 6 = 9m + 2$ | 7) $x^2 = 4$ | 8) $-15 = 3x - 30$ |
| 9) $y^2 = 144$ | 10) $2(3x - 10) = 4$ | 11) $k^3 = 1$ | 12) $5w + 18 = 9w - 8$ |
| 13) $6y = -54$ | 14) $18 = -3(x - 2)$ | 15) $x^2 = 64$ | 16) $x^3 = 8$ |
| 17) $10w - 15 = 7w$ | 18) $x^2 = 225$ | 19) $p^3 - 20 = 7$ | 20) $6x + 20 = -22$ |
| 21) $h^2 = 400$ | 22) $y + 1 = 2y + 10$ | 23) $x^3 + 10 = 18$ | 24) $3(x + 4) = 9x$ |