Why Is a Duplicate Key Like a Small Cake ?

Solve each equation below. (Be sure to check each apparent solution in the original equation.) Cross out the box that contains your solution. When you finish, print the letters from the remaining boxes in the spaces at the bottom of the page.

(1) $\sqrt{x} = 8$

(2) $\sqrt{4y} = 10$

(3) $\sqrt{6x} = 12$

(4) $\sqrt{\frac{x}{5}} = 3$

(5) $\sqrt{\frac{a}{3}} = 10$

(6) $\sqrt{x} + 7 = 11$

(7) $\sqrt{3x - 1} = 5$

(8) $\sqrt{5y} + 3 = 7$

(9) $\sqrt{2b + 4} = 8$

(10) $\sqrt{6x + 1} + 9 = 16$

(11) $\sqrt{3n + 8} - 5 = 0$

(12) $\sqrt{4t - 7} + 4 = 1$

(13) $\sqrt{\frac{x}{6}} + 2 = 7$

(14) $\sqrt{\frac{2m}{3}} + 6 = 9$

(15) $\sqrt{x} = 7\sqrt{2}$

(16) $\sqrt{4y - 3} = \sqrt{41}$

(17) $\sqrt{5x - 7} = \sqrt{3x + 3}$

(18) $4\sqrt{a} = \sqrt{4a + 27}$

Answers for exercises 1–6:

TH	BE	IT	CA
25	16	no solution	300
RE	RY	WI	TH
45	64	35	24

Answers for exercises 7–12:

HA	IS	US	AT
8	28	12	$\frac{5}{3}$
SH	TH	LD	LL
$\frac{16}{5}$	no solution	30	$\frac{17}{3}$

Answers for exercises 13–18:

OP	EA	TH	AS
$\frac{27}{2}$	5	98	150
NK	DE	SK	EY
32	$\frac{9}{4}$	11	no solution

OBJECTIVE 3–p: To solve radical equations (solving a quadratic equation is not required).