

Savoir TA. 3a Corrigés

Corrigé Exercice 11

a) $(x+3)(x-7) = 0$ $x+3 = 0$ ou $x-7 = 0$ $x = -3$ ou $x = 7$ $S = \{-3; 7\}$	b) $x(2x-6) = 0$ $x = 0$ ou $2x-6 = 0$ $x = 0$ ou $x = 3$ $S = \{0; 3\}$	c) $3(x+1)(5x-10) = 0$ $x+1 = 0$ ou $5x-10 = 0$ $x = -1$ ou $x = 2$ $S = \{-1; 2\}$
d) $-4x(20-4x) = 0$ $-4x = 0$ ou $20-4x = 0$ $x = 0$ ou $x = 5$ $S = \{0; 5\}$	e) $(x+7)^2 = 0$ $x+7 = 0$ $x = -7$ $S = \{-7\}$	f) $(7-2x)^2 = 0$ $7-2x = 0$ $x = \frac{7}{2} = 3,5$ $S = \{3,5\}$
g) $(3x-5)(3+7x) = 0$ $3x-5 = 0$ ou $3+7x = 0$ $x = \frac{5}{3}$ ou $x = -\frac{3}{7}$ $S = \{-\frac{3}{7}; \frac{5}{3}\}$	h) $7x(2+x)(2x-1) = 0$ $7x = 0$ ou $2+x = 0$ ou $2x-1 = 0$ $x = 0$ ou $x = -2$ ou $x = \frac{1}{2} = 0,5$ $S = \{-2; 0; 0,5\}$	i) $2x(4-3x)(2x+6) = 0$ $2x = 0$ ou $4-3x = 0$ ou $2x+6 = 0$ $x = 0$ ou $x = \frac{4}{3}$ ou $x = -3$ $S = \{-3; 0; \frac{4}{3}\}$

Savoir TA. 3b Corrigés

Corrigé Exercice 12

a) $x^2 = 49$ Il y a 2 solutions : -7 et 7	b) $0 = y^2$ Il y a 1 seule solution : 0	c) $x^2 = 6$ Il y a 2 solutions : $\sqrt{6}$ et $-\sqrt{6}$	d) $t^2 = 100$ Il y a 2 solutions : 10 et -10	e) $x^2 = -4$ Pas de solution	f) $13 = u^2$ Il y a 2 solutions : $\sqrt{13}$ et $-\sqrt{13}$	g) $h^2 = -5$ Pas de solution
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Corrigé Exercice 13

a) $x^2 - 2 = 14$ $x^2 = 16$ $S = \{-4; 4\}$	b) $5 - x^2 = 1$ $x^2 = 4$ $S = \{-2; 2\}$	c) $9 + 2x^2 = 15$ $2x^2 = 6$ $x^2 = 3$ $S = \{-\sqrt{3}; \sqrt{3}\}$	d) $x^2 - 81 = 0$ $x^2 = 81$ $S = \{-9; 9\}$
e) $4 - 5x^2 = 9$ $5x^2 = -5$ $x^2 = -1$ Pas de solution $S = \emptyset$	f) $7 - 2x^2 = 5$ $2x^2 = 2$ $x^2 = 1$ $S = \{-1; 1\}$	g) $2 = 8 - x^2$ $x^2 = 6$ $S = \{-\sqrt{6}; \sqrt{6}\}$	h) $1 - 0,5x^2 = 1$ $-0,5x^2 = 0$ $x^2 = 0$ $S = \{0\}$