

EXERCICES SUR LES EQUATIONS

A) Résoudre les équations suivantes:

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| 1) $x - 3 = 10$ | 6) $4 = 2 + t$ | 11) $x + 14 = 28$ |
| 2) $y + 7 = 19$ | 7) $7 = x - 3$ | 12) $y - 7 = 0$ |
| 3) $z - 15 = 20$ | 8) $21 = z + 16$ | 13) $2 + x = 7$ |
| 4) $t + 14 = 30$ | 9) $27 = 14 + y$ | 14) $y - 5 = 3$ |
| 5) $x + 7 = 7$ | 10) $19 = y + 2$ | 15) $x - 3 = 5$ |

B) Résoudre les équations suivantes:

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| 1) $x - \frac{1}{3} = \frac{1}{2}$ | 6) $\frac{1}{3} = x - \frac{6}{5}$ | 11) $2 = z + \frac{3}{4}$ |
| 2) $y + \frac{1}{3} = \frac{1}{2}$ | 7) $\frac{13}{7} = \frac{4}{3} + y$ | 12) $\frac{14}{21} + y = 2$ |
| 3) $\frac{5}{6} + z = 1$ | 8) $\frac{8}{9} = z - \frac{1}{9}$ | 13) $\frac{17}{9} - \frac{3}{7} = \frac{1}{3} + x$ |
| 4) $\frac{2}{3} + x = \frac{3}{4}$ | 9) $\frac{7}{2} = \frac{13}{5} + x$ | 14) $2 - \frac{1}{3} = x - \frac{1}{2}$ |
| 5) $y + \frac{7}{9} = 7$ | 10) $\frac{1}{2} + \frac{1}{3} = \frac{1}{6} + y$ | 15) $\frac{5}{6} = x - \frac{1}{3}$ |

C) Résoudre les équations suivantes:

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| 1) $2x = 3$ | 6) $3x = 12$ | 11) $3x = \frac{1}{2}$ |
| 2) $9y = 3$ | 7) $5y = 15$ | 12) $4y = \frac{4}{3}$ |
| 3) $7 = 2z$ | 8) $7z = 35$ | 13) $\frac{21}{35} = 5z$ |
| 4) $21 = 7x$ | 9) $7 = 3x$ | 14) $4 - \frac{2}{5} = 3x$ |
| 5) $36 = 3y$ | 10) $11 = 2y$ | 15) $\frac{3}{20} = 5t$ |

D) Résoudre les équations suivantes:

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| 1) $\frac{x}{3} = 2$ | 6) $\frac{3}{5}y = 6$ |
| 2) $3 = \frac{y}{5}$ | 7) $\frac{x}{2} = \frac{3}{5}$ |
| 3) $\frac{z}{7} = \frac{2}{7}$ | 8) $\frac{y}{3} = \frac{5}{6}$ |
| 4) $\frac{1}{3} + \frac{1}{4} = \frac{x}{6}$ | 9) $\frac{x}{4} = \frac{3}{3}$ |
| 5) $\frac{2}{3}x = \frac{1}{5}$ | 10) $\frac{y}{2} = \frac{7}{9}$ |

E) Résoudre les équations suivantes:

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| 1) $5x + 7 = 12$ | 6) $5x + 9 = 11$ | 11) $5x + 24 = 84$ |
| 2) $2 = 7y - 12$ | 7) $6y - 7 = 25$ | 12) $12y - 3 = 21$ |
| 3) $6z - 15 = 27$ | 8) $76 = 13z + 2$ | 13) $2z - 7 = 7$ |
| 4) $42 = 11y - 13$ | 9) $5y + 19 = 40$ | 14) $9x + 15 = 33$ |
| 5) $53 = 12z + 17$ | 10) $362 = 7z - 9$ | 15) $28 = 11t - 5$ |

F) Résoudre les équations suivantes:

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| 1) $\frac{x}{7} + 5 = 8$ | 6) $\frac{x}{3} + \frac{5}{6} = 1$ | 11) $\frac{14}{6} = \frac{y}{2} - \frac{2}{3}$ |
| 2) $\frac{y}{3} - 7 = 1$ | 7) $\frac{5}{12} + \frac{y}{8} = \frac{1}{2}$ | 12) $\frac{6x}{14} + \frac{5}{15} = 0.5$ |
| 3) $5 + \frac{z}{9} = 9$ | 8) $\frac{1}{2} = \frac{z}{5} - \frac{1}{4}$ | 13) $\frac{5y}{6} - \frac{3}{7} = \frac{10}{42}$ |
| 4) $\frac{13}{1} = \frac{x}{7} + 5$ | 9) $\frac{9}{20} = \frac{x}{2} - \frac{4}{5}$ | 14) $\frac{7}{2} = \frac{3}{4} + \frac{8z}{5}$ |
| 5) $\frac{y}{9} - 6 = 1$ | 10) $\frac{1}{2} + \frac{3z}{5} = 1.1$ | 15) $\frac{z}{4} - 9 = 2$ |

Solutions

A)

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| 1) $S = \{13\}$ | 6) $S = \{2\}$ | 11) $S = \{14\}$ |
| 2) $S = \{12\}$ | 7) $S = \{10\}$ | 12) $S = \{7\}$ |
| 3) $S = \{35\}$ | 8) $S = \{5\}$ | 13) $S = \{5\}$ |
| 4) $S = \{16\}$ | 9) $S = \{13\}$ | 14) $S = \{8\}$ |
| 5) $S = \{0\}$ | 10) $S = \{17\}$ | 15) $S = \{8\}$ |

B)

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|--------------------------------------|---------------------------------------|---------------------------------------|
| 1) $S = \left\{\frac{5}{6}\right\}$ | 6) $S = \left\{\frac{23}{15}\right\}$ | 11) $S = \left\{\frac{5}{4}\right\}$ |
| 2) $S = \left\{\frac{1}{6}\right\}$ | 7) $S = \left\{\frac{11}{21}\right\}$ | 12) $S = \left\{\frac{4}{3}\right\}$ |
| 3) $S = \left\{\frac{1}{6}\right\}$ | 8) $S = \{1\}$ | 13) $S = \left\{\frac{7}{33}\right\}$ |
| 4) $S = \left\{\frac{1}{12}\right\}$ | 9) $S = \left\{\frac{9}{10}\right\}$ | 14) $S = \left\{\frac{33}{6}\right\}$ |
| 5) $S = \left\{\frac{56}{9}\right\}$ | 10) $S = \left\{\frac{2}{3}\right\}$ | 15) $S = \left\{\frac{7}{6}\right\}$ |

C)

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|-------------------------------------|---------------------------------------|--|
| 1) $S = \left\{\frac{3}{2}\right\}$ | 6) $S = \{4\}$ | 11) $S = \left\{\frac{1}{6}\right\}$ |
| 2) $S = \left\{\frac{1}{3}\right\}$ | 7) $S = \{3\}$ | 12) $S = \left\{\frac{1}{3}\right\}$ |
| 3) $S = \left\{\frac{7}{2}\right\}$ | 8) $S = \{5\}$ | 13) $S = \left\{\frac{3}{25}\right\}$ |
| 4) $S = \{3\}$ | 9) $S = \left\{\frac{7}{3}\right\}$ | 14) $S = \left\{\frac{6}{5}\right\}$ |
| 5) $S = \{12\}$ | 10) $S = \left\{\frac{11}{2}\right\}$ | 15) $S = \left\{\frac{3}{100}\right\}$ |

D)

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| 1) $S = \{6\}$ | 6) $S = \{10\}$ |
| 2) $S = \{15\}$ | 7) $S = \left\{\frac{6}{5}\right\}$ |
| 3) $S = \{2\}$ | 8) $S = \left\{\frac{3}{2}\right\}$ |
| 4) $S = \left\{\frac{7}{2}\right\}$ | 9) $S = \left\{\frac{20}{3}\right\}$ |
| 5) $S = \left\{\frac{3}{10}\right\}$ | 10) $S = \left\{\frac{14}{9}\right\}$ |

E)

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|----------------|--------------------------------------|------------------|
| 1) $S = \{1\}$ | 6) $S = \left\{\frac{2}{5}\right\}$ | 11) $S = \{12\}$ |
| 2) $S = \{2\}$ | 7) $S = \left\{\frac{16}{3}\right\}$ | 12) $S = \{2\}$ |
| 3) $S = \{7\}$ | 8) $S = \left\{\frac{7}{13}\right\}$ | 13) $S = \{7\}$ |
| 4) $S = \{5\}$ | 9) $S = \left\{\frac{21}{5}\right\}$ | 14) $S = \{2\}$ |
| 5) $S = \{3\}$ | 10) $S = \{53\}$ | 15) $S = \{3\}$ |

F)

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|-----------------|--------------------------------------|--|
| 1) $S = \{21\}$ | 6) $S = \left\{\frac{1}{2}\right\}$ | 11) $S = \{6\}$ |
| 2) $S = \{24\}$ | 7) $S = \left\{\frac{2}{3}\right\}$ | 12) $S = \{0.388\}$ |
| 3) $S = \{36\}$ | 8) $S = \left\{\frac{15}{4}\right\}$ | 13) $S = \left\{\frac{4}{5}\right\}$ |
| 4) $S = \{56\}$ | 9) $S = \left\{\frac{5}{2}\right\}$ | 14) $S = \left\{\frac{55}{32}\right\}$ |
| 5) $S = \{63\}$ | 10) $S = \{1.0\}$ | 15) $S = \{44\}$ |

**Mise en pages des énoncés et
rédaction et mise en pages des solutions:**

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