**Solve the equation.**

1. 5x – 4 = 2(x – 2) 2. $\frac{5}{3}x-1=4+ \frac{2}{3}x$ 3. $\frac{2x-9}{4}$ = 2 + $\frac{x}{12}$

 4. $\frac{3}{y}+ \frac{6}{y}- \frac{1}{y}=11$ 5. (2x + 9)(4x – 3) = 8x2 – 12 6. $\frac{-5}{3x-9}+ \frac{4}{x-3}= \frac{5}{6}$

 7. $\frac{6}{2x+11}+5=5$ 8. $\frac{4}{2u-3}+\frac{10}{4u^{2}-9}= \frac{1}{2u+3}$ 9. $\frac{2x}{2x+3}+\frac{6}{4x+6}=5$

 10. $\frac{2}{2x+5}+\frac{3}{2x-5}=\frac{10x+5}{4x^{2}-25}$ 11. $\frac{-3}{x+4}+ \frac{7}{x-4}= \frac{-5x+4}{x^{2}-16}$ 12. $\frac{2}{2x+3}+ \frac{4}{2x-3}= \frac{5x+6}{4x^{2}-9}$

**Show that the equation is an identity.**

13. $\frac{x^{3}+8}{x+2}= x^{2}-2x+4$ 14. $\frac{49x^{2}-25}{7x-5}=7x+5$

**For what value of *c* is the number *a* a solution of the equation?**

15. 3x – 2 + 6c = 2c – 5x + 1; *a* = 4

**The formula occurs in the indicated application. Solve for the specified variable.**

16. C = 2$πr $for r. 17. R = $\frac{V}{I }$ for I. 18. A = P + Prt for r.

**Choose the equation that best describes the table of data. (Hint: Make assignments to Y1-Y4 and examine a table of their values.)**

19.

|  |  |
| --- | --- |
| x | y |
| 1 | 0.8 |
| 2 | -0.4 |
| 3 | -1.6 |
| 4 | -2.8 |
| 5 | -4.0 |

1. y = -1.2x + 2
2. y = -1.2x2 + 2
3. y = 0.8$\sqrt{x}$
4. y = x ¾ - 0.2