

Math 105 - Homework 2

Name: _____

Solve each equation. Show your work. No calculators.

1. $x + 5 = 7$

2. $4 - x = 3$

3. $-3x = 4$

4. $\frac{2}{3}u = \frac{1}{5}$

5. $\frac{y}{5} = \frac{3}{4}$

6. $4r - 3 = 13$

7. $2x + 5 = 11$

8. $5 - y = \frac{3}{10}$

9. $4 - 2s = 8s - 10$

10. $3 + 2y = 4 - 3y$

11. $\frac{t}{4} + 2 = \frac{t}{3}$

12. $\frac{x+4}{120} = \frac{1}{30}$

13. $\frac{3}{10}r + 7 = 4$

14. $\frac{-1}{2}x - 3 = \frac{3}{2}$

15. $\frac{2}{x} = \frac{4}{x+3}$

16. $3(x - 5) = 12$

17. $\frac{x-2}{5} = 10$

18. $\frac{x+5}{x} = 2$

19. $5 - \frac{u}{7} = 3$

20. $\frac{2}{q} - 3 = 4 - \frac{5}{q}$

21. $3z - 5 + z = 7z - 2 - 3z$

22. $\frac{4x - (-x) + 3x}{2} = -8$

23. $(5x + 4) + (2x + 1) = x + 5$

24. $\frac{x}{12} + \frac{x}{-3} = 10$

More \rightarrow

25. $\frac{4}{2-x} = -1$

26. $\frac{u}{u+4} = 3$

27. $\frac{x+1}{x+3} + \frac{x+2}{x+3} = 5$

28. $r^2 + 4 = 20$

29. $\frac{x^3 - 7}{2} = 10$

30. $\sqrt{y^2 - 5} = 2$

Solve each of the following equations for the indicated variable.

31. $E = mc^2$, solve for m

32. $16 = b^2 - 4ac$, solve for a

33. $A = \frac{1}{2}bh$, solve for h

34. $P = 2\ell + 2w$, solve for ℓ

35. $V = \frac{1}{3}\pi r^2 h$, solve for h .

36. $S = 2\pi r^2 + 2\pi r h$, solve for h .