

Name: _____

Date: _____ Period: _____

****No Calculator!!****

****Show all work****

Please complete each of the following showing all work. Please circle your final answer. No calculators are allowed.

Simplify:

1. $2x + 4y + 6x - 3y$

Simplify:

2. $3(2x - 5y) + 3x - 7y$

Solve:

3. $10 = \frac{x}{6}$

4. $20 = 4x$

5. $10 = \frac{2}{5}x + 3$

6. $2x + 10 = 5x + 8$

7. $2x + 4 - 4x = x + 3$

8. $2(3x + 4) - 10 = 3x + 3$

****No Calculator!!****

****Show all work****

Solve:

9. $10 = 3x + 4$

10. $30 = 4x - 2$

Simplify:

11. $\sqrt{40}$

Simplify:

12. $2\sqrt{12} + \sqrt{27}$

Simplify:

13. $5\frac{1}{5} - 2\frac{5}{8}$

14. $\frac{7}{9} \times \frac{1}{3}$

15. $4\frac{2}{3} \times 2\frac{3}{7}$

16. $\frac{6}{5} \div 3$

****No Calculator!!****

****Show all work****

Simplify:

17. $6\frac{4}{5} \div 8\frac{1}{3}$

18. $-3-6- -2$

19. $-3+6-(-2)- 3$

20. $10 - 15$

Factor:

21. $x^2 - 5x - 6$

Factor:

22. $x^2 - 25$

Multiply:

23. $(x+4)(x+3)$

Multiply:

24. $(x+4)(x^2 + 3x - 2)$

25. Determine whether 3 is a solution of the inequality $9x - 3 > 24$.

Evaluate the given expression.

****No Calculator!!****

****Show all work****

26. $\frac{(x+4)}{9}$ when $x = 23$

27. $(3x - 5)(y + 2)$

when $x = 3$ and $y = 2$

28. If you jog 300 feet per minute, how many feet will you jog in one hour?

29. A football field is 110 meters long and 49 meters wide. How many square meters of artificial turf are needed to cover the field?

30. A car traveled for two hours at a constant speed of 65 mph. How far did the car travel?

Solve:

31. $x^2 + 6^2 = 10^2$

32. Round 3.9619 to the nearest hundredth.

33. Write 0.625 as a fraction.

Write as a ratio in lowest terms:

****No Calculator!!****

****Show all work****

34. 20 g to 50 g

35. 7 cm to 1 m

Solve using the quadratic formula.

36. $x^2 - 5x - 7 = 0$

37. What is 35% of 64?

38. $\frac{4}{5}$ of 72 is what number?

39. 6 is what percent of 120?

40. 3 is 12% of what number?

Simplify:

41. $7 + 9 \times 8 - 3^2$

42. $6^2 + 5(8 - 11)$

43. Write the decimals in order from least to greatest.

****No Calculator!!****

****Show all work****

3.08, 3.0, 3.006, 3.0068, 3.7 _____, _____, _____, _____, _____

44. Joyce correctly answered 15 out of 20 questions on her French test. What percent did she answer correctly?

Solve

45. $\frac{x}{12} = \frac{5}{18}$