

8th Grade Summer Math Prep

Name _____

Mixed Number Review

1. $\left(-3\frac{1}{12}\right) - 6\frac{4}{9}$

2. $5\frac{4}{9} + \left(-3\frac{2}{3}\right)$

3. $-14\frac{2}{3} + 9\frac{4}{5}$

4. $6\frac{3}{5} - \left(-9\frac{4}{7}\right)$

5. $7\frac{12}{13} - \left(-5\frac{3}{10}\right)$

6. $3\frac{5}{9} - 7\frac{3}{4}$

7. $9\frac{3}{4} \cdot \left(-2\frac{2}{13}\right)$

8. $10\frac{2}{5} \div \left(2\frac{3}{5}\right)$

9. $\left(-15\frac{3}{4}\right) \div \left(-3\frac{1}{2}\right)$

10. $\left(-6\frac{2}{3}\right) \cdot \left(2\frac{1}{4}\right)$

11. $\left(-4\frac{4}{7}\right) \cdot 1\frac{15}{16}$

12. $-3\frac{7}{8} \div \left(-1\frac{7}{9}\right)$

8th Grade Math Prep Combining Like Terms

Combining Like Terms

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Directions: Simplify each expression.

1. $5x - 2x - 3x + 4x$

2. $4y - 12y + 7y - 6y$

3. $9n - 6n + 4n - 7n$

4. $3m - 5m + 4m$

5. $19 + 15bc - bc + 2$

6. $3x - 7x - 9x + 20$

7. $3a - 4b - 5a + 8b$

8. $5y - y + 10x - 3x$

9. $6x - 3x + 7y + 2y - 8z + 3z$

10. $5(x + 2y) - 5y$

11. $10 + 3(5m - 6) + 10m$

12. $10x - 4(x + 3) + 2(10 - 5x)$

8th Grade Math Prep Equations

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Multi-step equations

Directions: Show the line-by-line work to solve each equation. Remember to use inverse operations to make things disappear and isolate the variable.

1. $8x + 7 = 31$

2. $-9x + 1 = -80$

3. $2n + 10 = -2$

4. $\frac{n}{5} + 4 = 0$

5. $6w + 5w = -11$

6. $-6n - 2n = 16$

7. $8m + 13m = 63$

8. $-4x + 16 = 12$

9. $-2 + 5x + 30 = -37$

10. $10 + 30n = -80$

11. $x + 11 + 8x = 29$

12. $15m + 4 - 9m = -32$

13. $10w + 5(a - 3) = 15$

14. $\frac{x+9}{3} = 8$

15. $-5x - 2x = 84$