Math 9 Lesson 1: BEDMAS Operations

- Operations with rational numbers
  (addition, subtraction, multiplication, division, and order of operations)

1. $\frac{2}{3} + \frac{1}{2}$

2. $3 + \frac{3}{4}$

3. $3\frac{2}{3}$ is a mixed fraction. Write this fraction in the form $\frac{a}{b}$

4. 1.2×3.4

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

6. $2 \times \frac{3}{4}$

7. $\frac{3}{5} \div \frac{4}{5}$

8. $2 \div \frac{3}{5}$

9. $3 + 2 \times 4 - 6$

10. $0 \div 2$

11. $\frac{12}{2 \times 3}$

12. $3^2 + 5(1-2)^3$

13. 123×456

14. 32.4×1.27

15. -3^2

16. $-(-4)^2$

17. $(-1)^{101}$

18. $-3(-2)$

19. $3\frac{2}{3} + \frac{4}{5} - 1$

20. $\frac{2/3}{3/4}$

21. $6 \div 2(1+2)$

22. $\left(\frac{3}{2}\right)^2$

23. $\sqrt{\frac{9}{64}}$

24. $-2\left(3 - \frac{2}{3}\right)$

25. $\sqrt{400}$

26. $\sqrt{-25}$

27. $\sqrt{4} + \sqrt[3]{-8}$

28. Express $\dfrac{1230481}{3}$

   a. As a mixed fraction

   b. As a decimal number

   c. As a percent

29. Express $\dfrac{205713}{12}$ as a decimal number.

30. Simplify as a fraction: $0.\overline{3} + (5 - 1.\overline{6})$

31. Round 23578 to the nearest thousand

32. Simplify $\dfrac{12.4}{0.06}$ in the form $\dfrac{a}{b}$

33. Simplify $\dfrac{8 \div 2}{\frac{4}{3}}$

34. $-\dfrac{3}{4} \div \dfrac{1}{5} + \left(-\dfrac{1}{3} \times -\dfrac{5}{2}\right)$

35. $(-2^3)^2 - (-1)^{130} \div \left(\frac{2}{3}\right)$

36. $3(1-5) - \frac{(-3)^2}{-2^2}\left(2 - (5-6)\right)$

37. What is $\frac{1}{2}$ % of a billion?

38. Challenge:

    a. $0 \div 0$

    b. $\infty - \infty$

    c.   Convert $0.\overline{7}$ to a fraction

    d.   Convert $2.0\overline{13}$ to a fraction