

- Includes brackets and exponents
- Simplifying  $\left(-\frac{3}{4}\right) \div \frac{1}{5} + \left(\left(-\frac{1}{3}\right) \times -\frac{5}{2}\right)$
- Simplifying  $1 - 2 \times \left(\frac{4}{5}\right)^2$
- Paddle making
- Operations with rational numbers (addition, subtraction, multiplication, division, and order of operations)

1.  $2 + 3 \times 4$

2.  $-3^2 + (-3)^2$

3.  $3 - (-4)^2$

4.  $-3(-2)$

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

6.  $1\frac{2}{3} \div \frac{1}{2}$

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

8.  $\left(\frac{3}{2}\right)^2 + \frac{0}{1} - \sqrt{\frac{1}{64}}$

9.  $-2(-3) \div -1^2 + (1^0 - 0^1)$

10.  $\sqrt[3]{-8} + \left(\frac{2}{3}\right)^2$

11. Express  $\frac{1230481}{3}$

a. As a mixed fraction

b. As a decimal number

12.  $0.\bar{3} + (5 - 1.\bar{6})$

13.  $\frac{12.4}{0.02}$

14.  $\frac{8 \div 2}{\frac{4}{3}}$

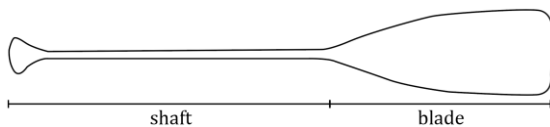
15.  $1 - 2 \times \left(\frac{4}{5}\right)^2$

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

17.  $(-2^3)^2 - (-1)^{101} \div \left(\frac{2}{10}\right)$

18. Challenge 1:  $0 \div 0$

19. Challenge 2: See diagram below:



Suppose the “blade” of a canoe paddle is  $\frac{2}{5}$  of its total length. The shaft portion of the paddle is 100 cm. How long are a dozen paddles put together tip to tip?