

In exercises 15 - 22, 43 - 46, 49 - 52, and 67 - 68, evaluate the given expression using order of operations.

15. $\frac{3}{4} + \frac{2}{5} \left(-\frac{1}{2}\right)^2$

18. $\frac{1}{5} + \frac{1}{9} \left(-\frac{3}{2}\right)^3$

21. $\left(\frac{15}{16} - \frac{1}{8}\right) \div \left(-9\frac{3}{4}\right)$

16. $\frac{1}{4} + \frac{8}{27} \left(-\frac{3}{2}\right)^2$

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

22. $\left(\frac{19}{36} - \frac{1}{6}\right) \div \left(-8\frac{2}{3}\right)$

17. $\frac{1}{6} + \frac{9}{8} \left(-\frac{2}{3}\right)^3$

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

43. $\frac{7}{8} - \left(\frac{4}{5} + 1\frac{3}{4}\right)$

44. $(\frac{5}{4})^2 + (\frac{2}{3} - 2\frac{1}{6})$

49. $\frac{2}{3}(-\frac{1}{4}) + \frac{1}{2}$

52. $-\frac{3}{16} - (-\frac{1}{2})^3$

45. $\frac{-\frac{14}{15}}{\frac{7}{10}}$

50. $-\frac{7}{8} - (\frac{1}{8})(\frac{2}{3})$

67. $(2 - \frac{1}{2})^2 + (2 + \frac{1}{2})^2$

46. $\frac{\frac{5}{27}}{-\frac{5}{9}}$

51. $\frac{4}{5} - (-\frac{1}{3})^2$

68. $(\frac{9}{20} \div 2\frac{2}{5}) + (\frac{3}{4})^2$

79. POSTAGE RATES Suppose you have an envelope which weighs, $\frac{1}{16}$ oz, a coupon book which weighs $\frac{5}{8}$ oz and a 3-page letter where each sheet of paper weighs $\frac{1}{16}$ oz. Set up an order of operations problem which represents the total weight of all of these items and then use order of operations to determine the entire weight of the items. If you stuff the coupon book and 3-page letter into the envelope, will you be able to send the entire package at a 1oz rate?

80. PHYSICAL THERAPY After back surgery, a patient followed a walking program shown in the table below to strengthen her muscles. What was the total distance she walked over this three-week period?

Week	Distance per day
#1	$\frac{1}{4}$ mi
#2	$\frac{1}{2}$ mi
#3	$\frac{3}{4}$ mi