

Fractions Decimals and Percents

1. Do each problem several ways

$$2 \frac{1}{2} - 1 \frac{1}{3} = \quad 12.25 - 1 \frac{1}{3} = \quad 1 \frac{1}{2} - 2 \frac{1}{3} =$$

$$2 \frac{1}{2} \times 3 \frac{1}{4} = \quad 3 \frac{1}{4} \div 2 \frac{1}{2} = \quad -\frac{5}{8} \div \frac{5}{4} =$$

$$25.4 \times \frac{3}{16} \quad 25.4 \times \frac{7}{32} = \quad -\frac{7}{8} \div -\frac{1}{4} =$$

$$\frac{2}{3} + \frac{3}{4} + \frac{4}{5} = \quad 2.5 - .125 = \quad 2.33 + 1.0625 =$$

2. Convert cu ft to liters, where 2.54 cm=1 in 12 in.=1 ft 1 liter=1000 cu cm
Convert 60 mph to ft/sec 1 mile =5280 ft 1 hr =60 min 1 min = 60 sec

3. Convert to decimal $2 \frac{1}{3} =$ $\frac{5}{8} =$

4. Convert to fraction 2.0625=

5. Calculate in decimals

$$\frac{1}{2} = \quad \frac{1}{2} \times \frac{1}{3} = \quad \frac{1}{2} \times \frac{1}{3} \times \frac{1}{4} = \quad \frac{1}{2} \times \frac{1}{3} \times \frac{1}{4} \times \frac{1}{5} =$$

6. Convert to % 2.51 .251 $\frac{3}{8}$

7. Convert to decimal and fraction 37.5% 25.27x8.25%

8. What is the cost of a \$100 item after a 60% and 30% discount

9. 29995)143.52

10. Show why $\frac{1}{7}$ has to repeat after 6 digits

Rate problems

1. A tagged sample of 25 fish are placed in a lake. A random sample of 30 fish are taken from the lake in which there are 12 of the tagged fish.

How many fish are there in the lake?

2. A train from Boston travels at 30 mph towards NYC. At NYC, which is a 180 miles from Boston, a train leaves at the same time traveling at 60 mph. If a bee on the front of the NY train flies at 80 mph towards the train from Boston, and then back to NY etc, how far will the bee have flown when the trains meet.

3. Two runners run around a track respectively for 12 and 17 laps. How many times do they pass each other when they are going in the same direction and when they are going in opposite directions.

4. What are the monthly mortgage payments for \$200,000 for a 30 years and 5% interest.