

## HESI MATHEMATICS

Things you need to know:

Fractions are essential in the math section. You must know how to add, subtract, multiply, divide, reduce, and turn into improper fractions.

Conversions:  $0C=32F$ .  $1ft=12in$ .  $2.54cm=1in$ .  $1gal=4qt$ .

$1gal=128oz$ .  $1qt=2pt$ .  $1pt=2c$ .  $1c=8oz$ .  $1oz=30mL$ .

King Henry Died Unusually Drinking Chocolate

Milk=kilo,hecta,deca,unit,deci,centi,milli.

- $1\frac{2}{3} + \frac{4}{7}$ .  $2\frac{5}{21}$
- $1.25 \times 2.0$  .  $2.5$
- $8.08$  change into a fraction.  $8\frac{2}{25}$
- Change  $\frac{1}{1000}$  to a ratio.  $1:1000$
- $0.2$  divided by  $1.1$ .  $0.18$
- How many fluid ounces are in  $2\frac{1}{2}$  gallons.  $320\text{ Oz}$
- How many ml are in 6 liters.  $6000ml$
- which fraction is equivalent to  $\frac{7}{28}$ .  $\frac{1}{4}$
- $\frac{5}{12} \times \frac{4}{9}$ .  $\frac{5}{27}$
- $1\frac{1}{2}$  divided by  $2$  .  $\frac{3}{4}$
- $0.5:20 :: x:200$  .  $5$
- $9:X :: 5:300$ .  $540$
- $3:10 :: 12:X$ .  $40$
- $\frac{7}{8} + \frac{9}{10} + \frac{6}{5}$ .  $2\frac{39}{40}$
- $\frac{1}{5}$  to decimal  $0.2$
- $32$  divided by  $\frac{8}{9}$ .  $36$
- $x:600 :: 4:20$   $120$
- $0.9$  divided by  $3$   $0.3$
- $3:5 :: x:10$   $6$
- $5\frac{3}{4}$  divided by  $\frac{1}{2}$ .  $11\frac{1}{2}$
- $0.6: X :: 0.3:2$   $4$

22. How many grams are in 4 kilograms 4000 grams
23. military time for 6 am 0600
24. 2100 in regular time 0900pm
25. 0.75 put into proportion and reduce to fraction  $\frac{3}{4}$
26. 0.12 change to percent 12%
27.  $12\frac{5}{6}$  divided by  $4\frac{2}{3}$ .  $2\frac{3}{4}$
28.  $5\frac{1}{3} + 3\frac{1}{2}$ .  $8\frac{5}{6}$
29.  $240:x:80:0.8$ . 2.4
30. 32 divided  $\frac{8}{9}$ . 36
31. 6gm to mg. 6000 mg
32.  $\frac{9}{10} - \frac{2}{5}$ .  $\frac{1}{2}$
33.  $5\frac{3}{4}$  divided  $\frac{1}{2}$ .  $11\frac{1}{2}$
34.  $\frac{4}{9} \times 1\frac{4}{5} \times \frac{2}{5}$ .  $\frac{8}{25}$
35.  $\frac{1}{4} + \frac{3}{8}$ .  $\frac{5}{8}$
36. Sarah ran a 24 mile race. She ran 6 miles in 1 hours, 6 miles in 1.2 hours, 6 miles in 1.5 hours, 6 miles in 1.6 hours. How long did it take her to finish the race? 5.3 hours
- 37.. Two chickens lay 6 eggs in 24 hours. How many chickens will lay 24 eggs in 24 hours? 8 chickens
39.  $\frac{7}{8} + \frac{9}{10} + \frac{6}{5}$ .  $2\frac{39}{40}$
40. 0.9 divided 3 0.3
41. Percentage word problem 54% of \$789.56? \$426.36
42. 0.5:20: x: 200. 5
43. 6 clients are throwing a party & each cake serves 24 servings & has a party of 70 & 3 staff. How many cakes are needed? 2  $\frac{3}{4}$  cakes
44.  $x=11$   $x+44/2(x)$ . 253
45. 2100 in military time? 9pm
46. A farmer has 240 acres under cultivation at the cost of \$188.99 per acre. If he averages a yield of 60 bushels per acre, what profit is expected if the price per bushel is \$5.67? 36,290.40
47. A man is reading a thick book. If he reads two chapters a day how long it will take him to read the book if there is 6 pages per chapter & 798 pg? 66.5 (67 rounded)
48. An office worker mails 25 envelopes to customers each day. Every envelope contains 3 reports with a paper clip on each one. The supply of paper clips is provided in boxes of 500. How many days will it take for the clerk to use up one box of paper clips? 6.66 – 7days.
49.  $12\frac{1}{8} - 9\frac{1}{2}$ .  $2\frac{5}{8}$
50.  $\frac{2}{3} + \frac{1}{6} + \frac{2}{5}$ .  $1\frac{7}{30}$
51.  $22\frac{4}{13} - 21\frac{2}{3}$ .  $25/39$