## HESI PREP TEST

## Explanation of HESI scores:

90\% to 100\%: Excellent
Super job! You have excellent Math skills and should have no difficulty calculating medication administration problems in your program.

80\% to 89\%: Very Good
Good job! You have very good Math skills and should be able to calculate medication administration problems in your program. However, you may need a little extra assistance from a knowledgeable person when preparing for medication administration tests.

## 79\% to 75\%: Satisfactory

You have adequate Math skills but are likely to need additional outside tutoring when learning to calculate medication administration problems.

74\% or below: Needs Improvement
You need to review and practice Math problems.
You would likely benefit from enrolling in an adult Math remediation program prior to entering your program or in conjunction with the beginning level courses.
Subject Area Number of questions

Math 50
Decimals 11
Fractions 23
Household measures 2
General Math 9
Algebra 10

## HESI MATH PRACTICE PROBLEM

1. Divide and simplify: $6 \div 2 \frac{2}{3}$
a. $2^{2 / 8}$
b. 16
c. $2^{1 / 4}$
d. $12^{2 / 3}$
2. Convert 0.60 to ratio in simplest form.
a. 2:50
b. 2:6
c. $1: 6$
d. 3:5
3. A shoe company sends out 7 trucks loaded with nursing shoes that cost the company $\$ \mathbf{1 , 5 7 2}$ per truck. If they send out 750 boxes per truck, what would be the profit if the cost per box is \$ 125.40?
a. 79,490.40
b. $614,400.00$
c. $45,357.60$
d. $647,346.00$
4. Calculate the quotient of $\frac{54,256}{45}$ (Round to the nearest tenth)
5. Multiply and reduced to lowest terms $\frac{5}{13} \times 3 \frac{3}{8}$
a. $45 / 104$
b. $104 / 45$
c. $1 \frac{31}{104}$
d. $5 / 9$
6. Add: $5 \frac{2}{3}+\frac{4}{7}$
a. $21 / 131$
b. $6^{5 / 21}$
c. $1^{2 / 5}$
d. $5^{26 /} 21$
7. The average speed of a high velocity train is $\mathbf{2 0 0}$ kilometers per hour. The distance between Paris and Naples is 7,346 km ( 1 mile = 1.609 km ). How long will the trip take? (Round to the nearest whole number).
a. 38 hours
b. $\quad 36.73$ hours
c. 37 hours
d. 3.8 hours
8. How many grams in $\mathbf{4 5 0}$ milligrams?
a. 45 grams
b. 0.45 grams
c. 4.5 grams
d. 450 grams
9. $23 / 15$ divided by $16 / 17=$
a. $391 / 240$
b. $3^{3 /}{ }_{4}$
c. $1^{151 / 240}$
d. 1
10. Convert 25.52 to a reduced fraction
a. $25 / 52$
b. $638 / 52$
c. $2552 / 100$
d. $25^{13} / 25$
11. Convert $3 / 5$ to a decimal.
a. 0.06
b. 1.6
c. 0.6
d. 3.50
12. $\operatorname{Add} 6^{1 / 4}+8^{1 / 3}=$
a. $14^{2 / 7}$
b. $\quad{ }^{19 / 4}$
c. $175 / 12$
d. $14^{7 /}{ }_{12}$
13. A recent online survey published that a hospital needs 9 nurses for every 45 patients. How many nurses a hospital would need in order to take car of 255 patients?
14. Convert $5 / 8$ to a decimal
a. 0.0625
b. 6.25
c. 0.625
d. 1.6
15. Convert 0.65 to a fraction in lowest term
a. $1 / 65$
b. $20 / 13$
c. $13 / 20$
d. $65 / 100$
16. A book store contains 75,972 books, divided in three sections: Science, Business, and Math. The science section represents $1 / 3$ of the total books. Of the remaining books, $75 \%$ are business. How many books are in the math section?
a. 50,648
b. 37986
c. 12,662
d. 25324
17. During final exams 172 students visited the math lab in total. If 4 out of 11 were male what is the percentage of female students who visited the math lab? (Round to the nearest tenth).
a. $63.6 \%$
b. $63.64 \%$
c. $62.5 \%$
d. $63 \%$
18. 0.2 divided by 1.1 ?
a. $\quad 1.818$
b. 0.1818
c. 181.8
d. 18.18
19. What is $\mathbf{5}$ percent of $\mathbf{5 0}$ ?
20. Solve for $x$ : 44:68::x: 236 (Round to the nearest tenth).
a. $x=155.53$
b. $x=152.7$
c. $x=88.65$
d. $x=135$
21. Miguel wants to get cheaper gas, so he drives out of his way to buy gas at $\mathbf{\$ 2 . 5 0}$ instead of $\$ 2.75$ at his local station. If he needs $\mathbf{1 5 . 5}$ gallons to fill his SUV, how much did he save by going to the less expensive station? (Round to the nearest hundredth).
a. $\$ 3.875$
b. $\$ 3.87$
c. $\$ 3.88$
d. $\$ 3.00$
22. Ben walks $\mathbf{2 5}$ miles from home to work. If he walks the first 5 miles in $\mathbf{1}$ hour, the second 5 miles in 1.4 hours, the third 5 miles in 1.7 hours and the last 5 miles in 1.8 hours, how long will it take him to complete the $\mathbf{2 5}$ mile walking distance? (Enter numeric value only. If rounding is required, round to the nearest tenth).
23. Convert $\mathbf{2 5 0}$ milliliters to litters
a. 2.5 L
b. 25 L
c. 0.25 L
d. 250000 L
24. Convert the metric equivalent: 500 mg equals x grams. (Enter the numerical value only).
25. How many liters are in $\mathbf{3 0 0}$ milliliters?
a. 30 liters
b. 0.3 liters
c. 3 liters
d. 0.03 liters
26. Ratio and proportion: 0.5:20:: $x: 200$
a. $x=25$
b. $x=5$
c. $x=50$
d. $x=4$
27. Change 66/4 to a decimal
a. 1.65
b. $32 / 2$
c. 0.165
d. 16.5
28. Which is the largest decimal?
a. 0.0688
b. 0.667
c. 0.68
d. 0.6
29. Convert the metric equivalent: 8,500 grams equals x kg. (Enter numerical value only).
30. Convert the fraction into decimals 7/4=175\% (Enter numerical value only).
31. How many milliliters are contained in 3 table spoons of fluid? (Enter numerical value only).
32. Solve for $x$ : 5:50:: $x: 500$
a. 4
b. 50
c. 5
d. 5.5
33. Convert $2 / 3$ to a decimal
a. 0.2222(repeating)
b. 0.3333 (repeating)
c. 0.6666 (repeating)
d. 1.5
34. Subtract $5 \frac{2}{3}-2 \frac{6}{7}$ (Enter numerical value only).
35. How many pints are in 80 ounces?
a. 16 pints
b. 1,280 pints
c. $\quad 15$ pints
d. 5 pints
36. There are 200 ounces in 6 liters. How many milliliters ( $\mathbf{m l}$ ) are in 6 liters? (Enter numerical value only).
37. How many gallons are in 576 ounces?
a. 4.5 gallons
b. 288 gallons
c. 4 gallons
d. 5 gallons
38. How many ounces are in $8^{1 / 4}$ pints?
a. 136 oz
b. 132 oz
c. 2.25 oz
d. 128 oz
39. Multiply $1.25 \times 2.0$
a. 250.0
b. 2.50
c. 0.250
d. 25.0
40. Add $4 / 5+3 / 15$ (reduced to lowest terms)
a. 1
b. $7 / 15$
c. $12 / 15$
d. $1 / 15$
41. How far does a runner run (in kilometers) in a 1,000 meter race?
a. 1 km
b. $1 / 2 \mathrm{~km}$
c. 3 km
d. 0.10 km
42. Henry was able to help 4 out of 9 of students that requested help in the math lab and Michelle helped 45\% of the total students who asked for help. Who helped more students, Henry or Michelle?
a. The amount cannot be calculated.
b. Henry
c. Michelle
d. They both helped the same number of students.
43. 27 students attended a HESI session in the Math Lab if 8 out of 11 were females, how many were male? (Round to a whole number)
44. 3 gallons is equal to how many ounces?
45. $5^{1 / 2}$ divide by $\mathbf{2}^{1 / 2}$
a. $21^{\prime}{ }_{2}$
b. 2.0
c. $2^{1 / 5}$
d. $2^{3 /}{ }_{4}$
46. How many teaspoons are there in 5 tablespoons?
a. 1.67 Tsps.
b. 0.6 Tsps.
c. 15 Tsps.
d. 1.5 Tsps.
47. Evaluate the expression: $4 x-5 y \quad x=-3$ and $y=2$
a. 22
b. -2
c. 2
d. -22
48. Solve the equation for $\mathrm{m}: 2 m+1=-3 m-1$
a. $2 / 5$
b. $-5 / 2$
c. $-2 / 5$
d. 0
49. Dr. Henry has his nursing staff line up at 4:30PM for the annual meeting. What would that be in military time?
a. 0430
b. 4030
c. 1630
d. 2030
50. 330 is $165 \%$ of what number
a. 150
b. 200
c. 20
d. 545
51. Write 1,763 as a Roman numeral
a. MDCCLII
b. MCDXXXVI
c. MDCCLXIII
d. MDCCLXII
52. What is the regular time for the given military time: 0507 ?
a. 5:07 A.M
b. 5:07 P.M
c. 7:05 A.M
d. 7:07 P.M
53. Subtract: $3 \frac{1}{2}-2 \frac{2}{3}$
a. $6 / 5$
b. $11 / 5$
c. $5 / 6$
d. $5 / 16$
54. What is the correct answer for MDCXLIV?
a. 1544
b. 1654
c. 1554
d. 1644
55. What $\%$ of 200 is $\mathbf{3 4}$ ?
a. $34 \%$
b. $68 \%$
c. $17 \%$
d. 20\%.

## Answer Key

1. C
2. $D$
3. D
4. 1,205.7
5. C
6. B
7. C
8. B
9. C
10. D
11. C
12. D
13. 51 nurses
14. C
15. C
16. C
17. A
18. B
19. 2.5
20. B
21. C
22. 5.9 hours
23. C
24. 0.5 grams
25. B
26. B
27. D
28. C
29. 8.5 kilograms
30. 1.75
31. 45 milliliters
32. B
33. C
34. $2 \frac{17}{21}$
35. D
36. 6,000 milliliters
37. A
38. B
39. B
40. A
41. A
42. C
43. 7 males
44. 384 ounces
45. C
46. C
47. D
48. C
49. C
50. B
51. C
52. A
53. C
54. D
55. C
