MGF1107
Unit 1 - Chapter 12 Test

Name_____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) A nunber that can be represented as a quotient of intergers with a denominator not equal to zero is called a(n) _____ number. 1) _____

Express the rational number as a terminating or repeating decimal number.

2) $\frac{78}{100}$ 2) _____

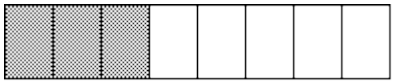
3) $\frac{3}{7}$ 3) _____

Write the fraction in lowest terms.

4) $\frac{24}{166}$ 4) _____

Write the fraction that represents the shaded area.

5) 5) _____



Perform the indicated operation and reduce your answer to lowest terms.

6) $\frac{5}{9} - \frac{3}{7}$ 6) _____

7) $\frac{5}{6} + \frac{1}{8}$ 7) _____

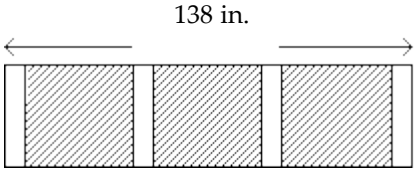
Perform the operation and give the answer as a fraction in lowest terms.

8) $\left(\frac{11}{13}\right)\left(-\frac{2}{9}\right)$ 8) _____

9) $\left(-\frac{2}{3}\right) \div \left(\frac{1}{5}\right)$ 9) _____

Solve the problem.

10) 10) _____



Four posts are used to support a fence. Each post is 4 inches wide and the posts are evenly s
If the width of the fence is 138 inches, how much space is between each post?

11) 11) _____

Find the rational number halfway between the following rational numbers:

$$\frac{1}{3}, \frac{5}{6}$$

Write the fraction as a terminating decimal.

12) $\frac{23}{25}$ 12) _____

Decide if the number is rational or irrational.

13) $\sqrt{36}$ 13) _____

14) $\sqrt{89}$ 14) _____

Approximate using your calculator.

15) $\sqrt{48}$ 15) _____

Simplify. Then use your calulator to approximate.

16) $\sqrt{135}$ 16) _____

Perform the indicated operations.

17) $8\sqrt{5} + 4\sqrt{45}$ 17) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

18) Given that $\pi \approx 3.14159265358979323846264338327 9...$, which of the following is the best approximation of π . explain your choice! 18) _____

A) $\frac{355}{113}$ B) $\frac{22}{7}$ C) 3.1605 D) 3.141592

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

19) Indicate the number of significant digits in the following number. 4 300 000 000 19) _____

20) 20) _____

Fid the greatest possible error fo the following measurement.

$$6\frac{3}{8}\text{in.}$$

21) 21) _____

A blueprint for a part specifies a measurement of 48.9 cm.
An actual measurement of the part has a measurement of 51.2 cm.

Determine the following: absolute error, relative error and percent error.

22) 22) _____

Add the following measurements. Give your answer using an appropriate degree of precision

15.87 m, 12.4 m, 185.2 m, 6.325 m

23) 23) _____

Using the provided ruler. What is the length of the following line segment in english and metric units:

24) 24) _____

Find the distance between the following points.

7.4 cm and 19.3 cm

25) 25) _____

Find the midpoint between the following points.

7.4 cm and 19.3 cm

1)
2) 0.78
3) $0.\overline{428571}$
4) $\frac{12}{83}$
5) $\frac{3}{8}$
6) $\frac{8}{63}$
7) $\frac{23}{24}$
8) $-\frac{22}{117}$
9) $-\frac{10}{3}$
10) $40\frac{2}{3}$ inches
11)
12) 0.92
13) Rational
14) Irrational
15) $4\sqrt{3}$
16) $3\sqrt{15}$
17) $20\sqrt{5}$
18) A
19)
20)
21)
22)
23)
24)
25)