Directions: This is a practice final exam which covers all chapters in this course.

Question: 1
Simplify.  
\((-3)^3\)  
(A) 9  
(B) 27  
(C) -27  
(D) -9  
(E) None of the above

Question: 2
Write the number 1000 using an exponent and the base 10.  
(A) 10^{10}  
(B) 3^{10}  
(C) 10^{3}  
(D) 10^{1000}  
(E) None of the above

Question: 3
Simplify.  
3 \cdot 6 - 5  
(A) 13  
(B) 4  
(C) 12  
(D) 3  
(E) None of the above

Question: 4
Simplify.  
840 \div 7 \cdot 3  
(A) 360  
(B) 390  
(C) 40  
(D) None of the above

Question: 5
Write 240 as a product of primes.  
(A) \(2^5 \cdot 3 \cdot 5\)  
(B) \(2^6 \cdot 3 \cdot 7\)  
(C) \(2 \cdot 3^4 \cdot 5\)  
(D) None of the above

Question: 6
Write 594 as a product of primes.  
(A) \(2^3 \cdot 3 \cdot 11\)  
(B) \(2^2 \cdot 3^3 \cdot 11\)  
(C) \(2 \cdot 3^3 \cdot 13\)  
(D) None of the above
Question: 7
\[ \frac{9}{13} - \frac{2}{13} \]
(A) \( \frac{11}{13} \)
(B) 7
(C) \( \frac{7}{13} \)
(D) \( \frac{8}{13} \)
(E) None of the above

Question: 8
\[ \frac{9}{11} - \frac{8}{11} \]
(A) \( \frac{1}{11} \)
(B) \( \frac{6}{11} \)
(C) 1
(D) \( \frac{2}{11} \)
(E) None of the above

Question: 9
\[ 9 \times \frac{1}{19} \]
(A) 19
(B) \( \frac{9}{19} \)
(C) \( \frac{1}{10} \)
(D) \( \frac{1}{171} \)
(E) None of the above

Question: 10
\[ 4 \times \frac{1}{37} \]
(A) \( \frac{37}{1} \)
(B) \( \frac{1}{33} \)
(C) \( \frac{4}{37} \)
(D) \( \frac{1}{148} \)
(E) None of the above
Question: 11
Find the reciprocal:
\[
\begin{align*}
\text{(A)} & \quad 6 \\
\text{(B)} & \quad 16 \\
\text{(C)} & \quad \frac{6}{6} \\
\text{(D)} & \quad 61 \\
\text{(E)} & \quad \text{None of the above}
\end{align*}
\]

Question: 12
Find the reciprocal:
\[
\begin{align*}
\text{(A)} & \quad \frac{9}{7} \\
\text{(B)} & \quad 97 \\
\text{(C)} & \quad 79 \\
\text{(D)} & \quad \frac{9}{9} \\
\text{(E)} & \quad \text{None of the above}
\end{align*}
\]

Question: 13
Estimate by rounding to the nearest whole number: 12.1 + 8.7 + 0.07
\[
\begin{align*}
\text{(A)} & \quad 21.1 \\
\text{(B)} & \quad 21 \\
\text{(C)} & \quad 28.0 \\
\text{(D)} & \quad 22
\end{align*}
\]

Question: 14
Estimate by rounding to the nearest whole number: 7.2 + 11.7 + 0.09
\[
\begin{align*}
\text{(A)} & \quad 20 \\
\text{(B)} & \quad 19 \\
\text{(C)} & \quad 19.1 \\
\text{(D)} & \quad 28.0
\end{align*}
\]

Question: 15
Which of the following is the word name for 4.3?
\[
\begin{align*}
\text{(A)} & \quad \text{forty-three} \\
\text{(B)} & \quad \text{four and three tenths} \\
\text{(C)} & \quad \text{forty-three hundredths} \\
\text{(D)} & \quad \text{three and four tenths} \\
\text{(E)} & \quad \text{None of the above}
\end{align*}
\]

Question: 16
Which of the following is the word name for 9.244?
\[
\begin{align*}
\text{(A)} & \quad \text{nine and two hundred forty-four thousandths} \\
\text{(B)} & \quad \text{ninety-two and fifty-four hundredths} \\
\text{(C)} & \quad \text{eight and three hundred fifty-four thousandths} \\
\text{(D)} & \quad \text{ninety-two and forty-four hundredths} \\
\text{(E)} & \quad \text{None of the above}
\end{align*}
\]
Question: 17
$74.44 \times 82 =
(A) $6,848.48
(B) $6,112.28
(C) $6,104.08
(D) $6,924.08
(E) None of the above

Question: 18
$52.68 \times 16 =
(A) $842.88
(B) $316.08
(C) $682.88
(D) $841.28
(E) None of the above

Question: 19
Add:
335.151 + 267.332
(A) 602.483
(B) 602.583
(C) 702.483
(D) None of the above

Question: 20
Add:
474.766 + 100.725
(A) 585.491
(B) 575.491
(C) 576.491
(D) None of the above

Question: 21
Which of the following is not equal to the ratio 12 to 15?

(A) 4:5
(B) 5:4
(C) \( \frac{8}{10} \)
(D) 4 to 5
(E) None of the above

Question: 22
Which of the following is not equal to the ratio 24 to 64?

(A) 8:3
(B) 3 to 8
(C) \( \frac{21}{56} \)
(D) 3:8
(E) None of the above
Question: 23
\[
\frac{\varepsilon}{2} = \frac{5}{20}
\]
Solve: \( \frac{\varepsilon}{2} = \frac{5}{20} \)
(A) 10
(B) \( \frac{1}{4} \)
(C) \( \frac{1}{2} \)
(D) None of the above

Question: 24
\[
\frac{n}{5} = \frac{2}{50}
\]
Solve: \( \frac{n}{5} = \frac{2}{50} \)
(A) \( \frac{1}{10} \)
(B) \( \frac{1}{5} \)
(C) \( \frac{1}{25} \)
(D) None of the above

Question: 25
There are 5 male students to every 8 female students at a local school. Select the statement of the condition when there are 22 male students.
(A) \( \frac{5}{8} = \frac{22}{x} \)
(B) \( \frac{5}{8} = \frac{x}{22} \)
(C) \( \frac{22}{5} = \frac{8}{x} \)
(D) None of the above

Question: 26
There are 2 male students to every 6 female students at a local school. Select the statement of the condition when there are 35 male students.
(A) \( \frac{2}{6} = \frac{35}{x} \)
(B) \( \frac{6}{2} = \frac{35}{x} \)
(C) \( \frac{2}{6} = \frac{x}{35} \)
(D) None of the above
**Question: 27**  
A geometry class consists of 12 males and 14 females. Find the ratio of females to the entire class.

(A) \[
\frac{14}{12}
\]  
(B) \[
\frac{14}{26}
\]  
(C) \[
\frac{12}{26}
\]  
(D) \[
\frac{12}{14}
\]

---

**Question: 28**  
A science class consists of 18 males and 11 females. Find the ratio of females to the entire class.

(A) \[
\frac{18}{29}
\]  
(B) \[
\frac{11}{18}
\]  
(C) \[
\frac{18}{11}
\]  
(D) \[
\frac{11}{29}
\]

---

**Question: 29**  
Which shows 58% as a fraction in simplest form?

(A) \[
\frac{29}{50}
\]  
(B) \[
\frac{3}{5}
\]  
(C) \[
\frac{58}{100}
\]  
(D) \[
\frac{57}{100}
\]  
(E) None of the above

---

**Question: 30**  
Which shows 95% as a fraction in simplest form?

(A) \[
\frac{19}{20}
\]  
(B) \[
\frac{24}{25}
\]  
(C) \[
\frac{93}{100}
\]  
(D) \[
\frac{95}{100}
\]  
(E) None of the above
Question: 31
Choose the unit of measure that provides the best estimate. A child’s tricycle is about 5 _____ tall.
(A) mm  
(B) cm  
(C) dm  
(D) m  
(E) km

Question: 32
Choose the unit of measure that provides the best estimate. A small television is about 3 _____.
(A) mg  
(B) g  
(C) kg

Question: 33
The chances of the Astros defeating the Mets in a baseball game are 5 in 8. What are the chances that the Astros will beat the Mets as a percent?
(A) 85%  
(B) 62.5%  
(C) 15%  
(D) 37.5%  
(E) None of the above

Question: 34
Robert made 14 of 40 free throws at basketball practice. What percent did he make?
(A) 25.9%  
(B) 35%  
(C) 65%  
(D) 26%  
(E) None of the above

Question: 35
Roy earned 1.875 times as much per hour as Harry. Roy’s salary is what percent of Harry’s?
(A) 0.01875%  
(B) 18.75%  
(C) 1875%  
(D) 187.5%  
(E) None of the above

Question: 36
Jerry borrowed 1.355 times as much money as Terry. Jerry’s amount borrowed is what percent of Terry’s?
(A) 0.1355%  
(B) 1355%  
(C) 13.55%  
(D) 135.5%  
(E) None of the above

Question: 37
Question: 37
80% of 50 is what number?

(A) 4
(B) 400
(C) 40
(D) 8
(E) None of the above

Question: 38
40% of 30 is what number?

(A) 4
(B) 7
(C) 3
(D) 20
(E) None of the above

Question: 39
Kim wants to buy a used car and needs to have a down payment of 15%. If the car Kim wants to buy costs $3,300, how much down payment will she need?

(A) $1,500
(B) $2,805
(C) $495
(D) $1,800
(E) None of the above

Question: 40
Ann wants to buy a used car and needs to have a down payment of 35%. If the car Ann wants to buy costs $2,600, how much down payment will she need?

(A) $3,500
(B) $1,690
(C) $910
(D) $900
(E) None of the above

Question: 41
Nine one-foot rulers laid end to end reach how many inches?

(A) 21 in.
(B) 9 in.
(C) 107 in.
(D) 108 in.
(E) None of the above

Question: 42
Six one-foot rulers laid end to end reach how many inches?

(A) 72 in.
(B) 18 in.
(C) 71 in.
(D) 6 in.
(E) None of the above
Question: 43
Seven centimeters is how many millimeters?
(A) 7,000 mm
(B) 0.7 mm
(C) 700 mm
(D) 70 mm
(E) None of the above

Question: 44
One centimeter is how many millimeters?
(A) 100 mm
(B) 1,000 mm
(C) 10 mm
(D) 0.1 mm
(E) None of the above

Question: 45
If Heidi worked at the Maritime Museum from opening until 3:15 p.m., how long did she work?
(A) Four hours and thirty minutes
(B) Four hours
(C) Six hours and fifteen minutes
(D) Two hours
(E) None of the above

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<tbody>
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</tr>
<tr>
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<td>M–F</td>
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<td></td>
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</table>

Question: 46
How many more hours is City Hall open on Monday than Sunday?
(A) Two hours
(B) Thirty minutes
(C) One hour
(D) One hour and thirty minutes
(E) None of the above

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Question: 47
What is a reasonable length for a swimming pool?
(A) 12 ft
(B) 12 mi
(C) 12 yd
(D) 12 in.
Question: 48

What is a reasonable length for a pencil?  
(A) 5 mi  
(B) 5 ft  
(C) 5 in.  
(D) 5 yd

Question: 49

Which set of numbers has a mean of 34?  
(A) 33, 34, 35, 36, 37  
(B) 36, 34, 34, 34, 36  
(C) 30, 32, 34, 37, 41  
(D) 32, 33, 34, 35, 36  
(E) None of the above

Question: 50

Which set of numbers has a mean of 28?  
(A) 30, 28, 28, 28, 30  
(B) 27, 28, 29, 30, 31  
(C) 24, 26, 28, 31, 35  
(D) 26, 27, 28, 29, 30  
(E) None of the above

Question: 51

Grade 7 students were surveyed to determine how many hours a day they spent on various activities. The results are represented in the circle graph below. About how much time altogether was spent on homework and school?  

(A) 7 hr  
(B) 8 hr  
(C) 9 hr  
(D) 10 hr
Question: 52
Grade 7 students were surveyed to determine how many hours a day they spent on various activities. The results are represented in the circle graph below.

The circle graph represents how much time the students spent on various activities in one 24 hour day.

About how much time altogether was spent on sleeping and watching TV?

(A) 46 hr
(B) 11 hr
(C) 12 hr
(D) 24 hr

Question: 53

The bar graph shows the average life span of several animals.

(A) about 11 years
(B) about 35 years
(C) about 7 years
(D) about 46 years

About how many years longer is the average life span of a grizzly bear than the average life span of an arctic wolf?
Question: 54
Susan learned more spelling words during the second week than the first. How many more?

(A) 12  
(B) 6  
(C) 8  
(D) 10

![Susan's Chart]

Question: 55
Professor Pringle tested her new invention, the Superduper House Cleaning Robot. She created two models to compare their ability to clean. The first test involved washing windows. How many windows did Robot A clean in 20 seconds?

(A) 3  
(B) 2  
(C) 5  
(D) Cannot be determined

![Robot A and Robot B chart]
Question: 56
Professor Pringle tested her new invention, the Superduper House Cleaning Robot. She created two models to compare their ability to clean. The first test involved washing windows. How many windows did Robot B clean in 40 seconds?

(A) 3  
(B) 2  
(C) 4  
(D) Cannot be determined  
(E) None of the above

Question: 57
Using the frequency table below, determine how many students received a score of 80 or better on an English exam.

<table>
<thead>
<tr>
<th>Score Interval</th>
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<tbody>
<tr>
<td>50 – 59</td>
<td>5</td>
</tr>
<tr>
<td>60 – 69</td>
<td>5</td>
</tr>
<tr>
<td>70 – 79</td>
<td>10</td>
</tr>
<tr>
<td>80 – 89</td>
<td>6</td>
</tr>
<tr>
<td>90 – 100</td>
<td>2</td>
</tr>
</tbody>
</table>

(A) 2  
(B) 8  
(C) 6  
(D) 18  
(E) None of the above

Question: 58
Using the frequency table below, determine how many students received a score of 60 or better on an English exam.

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<td>60 – 69</td>
<td>7</td>
</tr>
<tr>
<td>70 – 79</td>
<td>8</td>
</tr>
<tr>
<td>80 – 89</td>
<td>4</td>
</tr>
<tr>
<td>90 – 100</td>
<td>2</td>
</tr>
</tbody>
</table>

(A) 3  
(B) 14  
(C) 21  
(D) 7  
(E) None of the above
Question: 59
Which figure appears to be a trapezoid?

(A)
(B)
(C)
(D)

Question: 60
Which figure appears to be a kite?

(A)
(B)
(C)
(D)

Question: 61
True or false?

(A) true
(B) false

The figure is a polygon.
Question: 62
Find the perimeter of the shape shown below.

(A) 15 ft  
(B) 16 ft  
(C) 24 ft  
(D) 18 ft  
(E) None of the above

Question: 63
Find the perimeter of the shape shown below.

(A) 46 ft  
(B) 20 ft  
(C) 45 ft  
(D) 32 ft  
(E) None of the above

Question: 64
How many of these figures are solid figures?

(A) 1  
(B) 3  
(C) 2  
(D) 4
Question: 65
How many of these figures are solid figures?

(A) 3  
(B) 2  
(C) 4  
(D) 1

Question: 66
Which of the following statements is false?

(A) $1 > 0$  
(B) $-1 < 0$  
(C) $0 > -1$  
(D) $0 > 1$  
(E) None of the above

Question: 67
Which of the following statements is false?

(A) $-5 < 2$  
(B) $-2 > 5$  
(C) $5 > -2$  
(D) $2 > -5$

Question: 68
Which number line illustrates the subtraction equation?
$-6 - (-11) = 5$

(A)  
(B)  
(C)  
(D)  
(E) None of the above
Question: 69
Which number line illustrates the subtraction equation?
\[ 6 - 10 = -4 \]

(A) 
(B) 
(C) 
(D) 
(E) None of the above

Question: 70
Find the product:
\[ 8 \cdot (-5) \]

(A) 3 
(B) 13 
(C) 40 
(D) -40 
(E) None of the above

Question: 71
Find the product:
\[ -2 \cdot 6 \]

(A) -8 
(B) -12 
(C) 12 
(D) 4 
(E) None of the above

Question: 72
Which addition statement matches the number line?

(A) \((-6) + (+8) = -14\)
(B) \((-6) + (-8) = +2\)
(C) \((+2) + (+8) = -6\)
(D) \((-6) + (+8) = +2\)
(E) None of the above
Question: 73
Which addition statement matches the number line?

-6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6

(A) \(-2) + (-7) = +5
(B) \(+5) + (-7) = -2
(C) \(+5) + (-7) = +12
(D) \(+5) + (+7) = -2
(E) None of the above

Question: 74
Find an expression for the statement:
a number \(x\) multiplied by 16

(A) \(16x\)
(B) \(x + 16\)
(C) \(x - 16\)
(D) \(\frac{x}{16}\)
(E) None of the above

Question: 75
Find an expression for the statement: a number \(m\) increased by 11

(A) \(m + 11\)
(B) \(m - 11\)
(C) \(\frac{m}{11}\)
(D) \(11m\)
(E) None of the above

Question: 76
Does the number 3 satisfy the equation 

9 = 12 - \(x\)

(A) Yes
(B) No

Question: 77
Which number is a solution of the following equation?

\(-1 + x = -4\)

(A) \(-5\)
(B) \(-3\)
(C) \(3\)
(D) \(5\)
(E) None of the above

Question: 78
The cost of a school banquet is $(75 + 15n),
where \(n\) is the number of people attending the banquet. What is the cost for a banquet attended by 41 people?

(A) $630
(B) $690
(C) $705
(D) $615
(E) None of the above
Question: 79
The cost of a school banquet is $(65 + 12n)$, where $n$ is the number of people attending the banquet. What is the cost for a banquet attended by 45 people?

(A) $605
(B) $552
(C) $540
(D) $617
(E) None of the above

Question: 80
Find the solution of the equation:

$x - 3 = 2$

(A) 1
(B) -1
(C) 5
(D) -5
(E) None of the above

Question: 81
If $3x = 33$, then $x =$

(A) 99
(B) $\frac{1}{99}$
(C) $\frac{1}{11}$
(D) 11
(E) None of the above

Question: 82
Solve:

$20 = 4y$

(A) 1
(B) 24
(C) 6
(D) 5
(E) None of the above

Question: 83
Solve for $q$.

$\frac{q}{8} = 1.9$

(A) 7.2
(B) 72
(C) 15.2
(D) 152
(E) None of the above

Question: 84
Solve:

$\frac{z}{4} = 8.1$

(A) 2.02
(B) 324
(C) 20.2
(D) 32.4
(E) None of the above
Question: 85
Find the solution of the equation:
\[-\frac{3}{4}x = -1 \frac{1}{12}\]
(A) \(\frac{4}{9}\)
(B) \(\frac{4}{9}\)
(C) \(\frac{2}{9}\)
(D) \(-1 \frac{1}{12}\)
(E) None of the above

Question: 86
Find the solution of the equation:
\[-\frac{5}{6}x = -5 \frac{1}{6}\]
(A) \(-\frac{1}{6}\)
(B) \(-\frac{1}{5}\)
(C) \(-\frac{1}{5}\)
(D) \(-\frac{4}{5}\)
(E) None of the above

Question: 87
Solve. \(w + 5 = 12\)
(A) 5
(B) 7
(C) 14
(D) 8
(E) None of the above

Question: 88
Solve. \(9 + c = 14\)
(A) 5
(B) 9
(C) 10
(D) 4
(E) None of the above
Question: 89
Solve.
$-9x + 16 + 11x = 34$

(A) $\frac{9}{10}$
(B) 9
(C) 25
(D) $\frac{5}{2}$
(E) None of the above

Question: 90
Find the solution of the equation:
$3(x - 4) + 3 - 2x = 2$

(A) 17
(B) 3
(C) 11
(D) 9
(E) None of the above

Question: 91
Find the solution of the equation:
$0.4d - 0.06 + 0.1d = 0.4 + d$

(A) 0.92
(B) -0.68
(C) -0.92
(D) 0.68
(E) None of the above

Question: 92
Find the solution of the equation:
$0.3q - 0.06 + 0.2q = q + 0.3$

(A) -0.72
(B) -0.48
(C) 0.48
(D) 0.72
(E) None of the above

Question: 93
Which value of $x$ makes the equation true?
$1 = 8 - x$

(A) -9
(B) 7
(C) 9
(D) -7
(E) None of the above

Question: 94
Which value of $x$ makes the equation true?
$2 = 5x - 1$

(A) $\frac{3}{5}$
(B) 3
(C) 1
(D) $\frac{1}{5}$
(E) None of the above
Question: 95
Choose the simplified form of the expression.

\[5x^4 + 6x^2 - 2x + x^3\]

(A) \(-2x^4 + 7x^2 + 6x\)
(B) The expression is simplified.
(C) \(5x^4 + 7x^2 - 2x\)
(D) \(x^4 + 7x^2 + 6x\)
(E) None of the above

Question: 96
Choose the simplified form of the expression.

\[8x^2 + 5x - 7x^4 + 7x^2\]

(A) \(7x^4 + 15x^2 + 5x\)
(B) \(-7x^4 + 15x^2 + 5x\)
(C) \(8x^4 + 15x^2 - 7x\)
(D) \(-7x^4 + 8x^2 + 7x^2 + 5x\)
(E) None of the above

Question: 97
True or false?
A triangle is a polygon with 4 sides.

(A) true
(B) false

Question: 98
Write an expression for the missing value in the table.

<table>
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<tr>
<th>minutes</th>
<th>0</th>
<th>1</th>
<th>2</th>
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<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

(A) \(\frac{y}{4}\)
(B) \(5y\)
(C) \(4y\)
(D) \(y + 4\)
(E) None of the above

Question: 99
Write an expression for the missing value in the table.

<table>
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<td>2</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>11</td>
</tr>
</tbody>
</table>

\(x\)

(A) \(3x + 2\)
(B) \(x + 5\)
(C) \(4x + 1\)
(D) \(2x + 5\)
(E) None of the above
Question: 100

A parallelogram has a base that is $\frac{7}{2}$ in. and a height that is $\frac{3}{5}$ in. Find the area of the parallelogram.

(A) $\frac{21}{2}$ in$^2$
(B) $\frac{20}{5}$ in$^2$
(C) $\frac{2}{7}$ in$^2$
(D) $\frac{25}{2}$ in$^2$
(E) None of the above

Question: 101

A parallelogram has a base that is $2\frac{1}{3}$ cm and a height that is $\frac{3}{4}$ cm. Find the area of the parallelogram.

(A) $18\frac{7}{12}$ cm$^2$
(B) $10\frac{7}{12}$ cm$^2$
(C) $15\frac{3}{7}$ cm$^2$
(D) $19\frac{5}{7}$ cm$^2$
(E) None of the above

Question: 102

Name two radii.

(A) $\overline{BA}$ and $\overline{EA}$
(B) $\overline{CA}$ and $\overline{BC}$
(C) $\overline{DB}$ and $\overline{EC}$
(D) $\overline{DB}$ and $\overline{CE}$
(E) None of the above

Question: 103

Name all of the diameters shown in the circle.

(A) $\overline{QS}$ only
(B) $\overline{RP}$ only
(C) $\overline{RP}$ and $\overline{SP}$
(D) $\overline{RP}$, $\overline{QP}$, and $\overline{SP}$
(E) None of the above
Question: 104
Classify the triangle with sides of lengths 18, 18, and 18.

(A) equilateral and isosceles
(B) scalene
(C) cannot be determined
(D) isosceles

Question: 105
Classify the triangle with sides of lengths 21, 13, and 15.

(A) isosceles
(B) isosceles and equilateral
(C) scalene
(D) cannot be determined

Question: 106
Which of the following shows −0.6 as a fraction in simplest form?

(A) \(-\frac{6}{10}\)
(B) \(-\frac{8}{5}\)
(C) \(-\frac{3}{50}\)
(D) \(-\frac{3}{5}\)
(E) None of the above

Question: 107
Which of the following shows 0.2 as a fraction in simplest form?

(A) \(\frac{1}{50}\)
(B) \(\frac{1}{5}\)
(C) 2
(D) \(\frac{1}{2}\)
(E) None of the above

Question: 108
Solve for \(p\).

\[7m + 3p = 5\]

(A) \(p = \frac{5 + 3m}{7}\)
(B) \(p = \frac{5 + 7m}{3}\)
(C) \(p = \frac{5 - 7m}{3}\)
(D) \(p = -8 - 7m\)
(E) None of the above
Question: 109
Solve for \( h \).
\[ V = \frac{1}{3} \pi (h + ℓ) \]
(A) \( h = \frac{V}{\frac{2\pi}{3}} + ℓ \)
(B) \( h = \frac{3\pi}{2} + V/ℓ \)
(C) \( h = \frac{3\pi}{2} + ℓ \)
(D) \( h = \frac{3V}{\pi} - ℓ \)
(E) None of the above

Question: 110
One kilogram is approximately equal to 2.21 pounds. Find the number of kilograms in 215 pounds. Round to the nearest tenth of a kilogram, if needed.
(A) 475.2 kg
(B) 102.8 kg
(C) 972.9 kg
(D) 9.7 kg
(E) None of the above

Question: 111
Find the volume of the figure.

\[
\text{Volume} = \frac{1}{2} \times \text{base} \times \text{height}
\]
\[ = \frac{1}{2} \times 5.2 \times 4 \times 7 \]
(A) 72.8 cm\(^3\)
(B) 57.2 cm\(^3\)
(C) 48.8 cm\(^3\)
(D) 36.4 cm\(^3\)
(E) None of the above

Question: 112
Find the volume of the cylinder.

\[ V = \pi r^2 h \]
(A) 9,495.4 in\(^3\)
(B) 1,582.6 in\(^3\)
(C) 791.3 in\(^3\)
(D) 2,373.8 in\(^3\)
(E) None of the above

Use 3.14 for \( \pi \) and round the volume to the nearest tenth.
Question: 113
Use the fact that one mile is approximately 1.61 kilometers to find the number of miles in 325 kilometers. Round to the nearest hundredth of a mile, if needed.

(A) 20.2 miles
(B) 5,232.5 miles
(C) 523.3 miles
(D) 2,018.6 miles
(E) None of the above

Question: 114
Solve the equation \( s - 7 = 54 \). Check your answer.

(A) \( s = 48 \)
(B) \( s = 57 \)
(C) \( s = 47 \)
(D) \( s = 61 \)

Question: 115
Divide.

\[ 92.4 \div 0.04 \]

(A) 2330
(B) 2320
(C) 2310
(D) 2300

Question: 116
Divide.

\[ -8.32 \div 2.6 \]

(A) \( -2 \)
(B) \( -3 \)
(C) \( -3.2 \)
(D) \( -3.6 \)

Question: 117
Find the area of the circle to the nearest tenth. Use 3.14 for \( \pi \).

(A) 511.1 ft\(^2\)
(B) 651.1 ft\(^2\)
(C) 162.8 ft\(^2\)
(D) 45.2 ft\(^2\)
Question: 118
Find the area of the circle to the nearest tenth.
Use 3.14 for π.

\[ A = \pi r^2 \]

\[ A = 3.14 \times (62/2)^2 \]

\[ A = 3.14 \times 31^2 \]

\[ A = 3.14 \times 961 \]

\[ A = 3020.54 \]

\[ A = 3020.54 \text{ cm}^2 \]

(A) 482.8 cm²  (B) 120.7 cm²  (C) 38.9 cm²  (D) 379 cm²

Question: 119
Simplify.

\[ 5 + \frac{1}{4} - \frac{5}{8} \]

(A) 111  (B) 31  (C) 27  (D) 13  (E) None of the above

Question: 120
Simplify.

\[ (2.5(4.1+5+2.5))^2 \]

(A) 93.025  (B) 30.5  (C) 232.5625  (D) 82.81  (E) None of the above
### Answers to MAT 1012 Practice Final Exam

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