Enclosed please find the following submission for Community Education regarding the non-credit gateway course of **INTRODUCTION TO CONSUMER FINANCE**

- Appendix B
- Course Outline
- Course Syllabus
- Assessment plan
- Roster example
- Sign-in sheet example-included in the Course Outline, “L”
- Attendance policy
- Instructor evaluation
- Pre-test and post-test
- Non-credit course number that aligns to academic credit bearing course-see Appendix B, 13a and 13b.
Appendix B

Request Form: Approval of State Aid for a Non-Credit Remedial Course

<table>
<thead>
<tr>
<th>Campus</th>
<th>1. Name: (If course to be offered at a branch campus, please specify.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUNY ERIE COMMUNITY COLLEGE/COMMUNITY EDUCATION/CITY CAMPUS</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Contact</th>
<th>2. Name: Carrie Kahn, Executive Dean Community Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3. Email: <a href="mailto:kahn@ecc.edu">kahn@ecc.edu</a></td>
</tr>
<tr>
<td></td>
<td>4. Phone: 716.851.1800</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chief Academic Officer</th>
<th>5. Name: Richard Washousky Executive VP of Academic Affairs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6. Email: <a href="mailto:Washousky@ecc.edu">Washousky@ecc.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Signature:</th>
<th>8. Date</th>
</tr>
</thead>
</table>

Note: Signature of the Chief Academic Officer assures that the proposed course or program is consistent with SUNY policy and affirms full academic oversight by the campus. Signature also verifies that quality controls, including assessment and reporting requirements are in place and satisfy §602.5 and MSCHE accreditation standards.

|------------------|---------------------------------------------|--------------------------------------------------|

11. Course Description:

A general interest course designed to help the individual better understand the financial world in which we live today. Topics will enhance one’s ability to make personal financial decisions which will include establishing an individual’s financial goals, making decisions on saving money, making investments, buying a car, acquiring insurance and budgeting. This course is designed to benefit all and therefore, no prior business training is required.

12. Please separately attach to this form a course syllabus

See attached syllabus.

<table>
<thead>
<tr>
<th>Alignment with Credit-Bearing Coursework</th>
<th>13. Identify the credit-bearing course and/or program for which the proposed non-remedial course or program is designed to prepare students.</th>
</tr>
</thead>
</table>

14. Is this course equivalent to any financial aid-eligible course offered on a semester basis—for imputed credit or equivalent credit? If so, identify course designation, number and title in the boxes below

<table>
<thead>
<tr>
<th></th>
<th>15. Course title:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
15. Describe how the course or program is consistent with the *Non-credit Remedial Course Aid: Program Guidelines* as well as with campus and SUNY mission/priorities:

Per the MTP 13(4) guidelines, this course will correct or improve “such basic skills as oral and written communications, reading, analytical concepts and general study habits and patterns, to overcome in part or in whole any marked deficiency which interferes with a student’s ability to pursue an educational objective effectively” and does not focus on computer skills or community service type activities.

The ECC Mission Statement commits the institution to meet “the needs of a diverse student body” and to contribute to “regional economic vitality by providing excellent, flexible, affordable and accessible educational programs in a multi-campus environment committed to continuous improvement.” The Vision Statement states that SUNY ECC strives toward “a future of accessible education….where students can acquire career competencies…along with the resources to achieve their goals.”

The proposed offerings would be quite compatible with Erie Community College and SUNY missions, guidelines and priorities.

16. Describe requirements for faculty credentials and experience.

Faculty members assigned to this course will bear credentials substantially equivalent to those teaching BU233; namely, an MBA or J.D. degree and at least three years of experience teaching in this area, and or working in a responsible position with the materials covered in this course.

17. No. of meetings per week:
   - Five

18. How many hours:
   - Fifteen/week

19. How many weeks:
   - Three

20. On campus, community site, extension center, etc.?
   - Instruction will take place ECC three campus locations.

21. Confirm that course is open admission (y/n):
   - Yes

22. Estimated semester / annual enrollment (headcount):
   - 250 annually

23. Estimated annual avg. course FTE:
   - 25

24. Course tuition per student:
   - $0. One Stop customers entering college are prohibited from paying fees.

25. Course fees per student:

26. Co-sponsor, if any:

27. Funding sources other than non-credit remedial State aid if applicable:

28. Please separately attach to this form an Assessment Plan.
   - See attached Assessment Plan

Please submit form and required attachments via e-mail to: noncredit@sysadm.suny.edu.
A. Unit Code and Suggested Course Title: NCR-233 Introduction to Consumer Finance

B. Curriculum/Program: Community Education

C. Catalog Description: The adult learner will be provided with an introduction to the financial world in which we live today. Topics will enhance one’s ability to make personal financial decisions which will include establishing an individual’s financial goals, making decisions on saving money, making investments, buying a car, acquiring insurance and budgeting. This course is designed to benefit all and therefore, no prior business training is required. These skills will better prepare the adult learner for proficiency in college coursework. This course will prepare the adult learner for the colleges ACCUPLACER and entrance into the credit bearing course BU-233.

D. Duration of Instructional Period: The course will offer 45 academic clock hours of instruction, five days per week, three hours per day, for three weeks to equal 45 academic hours of instruction.

E. Academic Credit/Contact Hours: Not applicable, this is a non-credit remedial/developmental course which will align with gateway credit bearing courses to meet the new SUNY objective.


G. Course Outcomes: Upon completion of the course, the student will:
   1. Construct an annual personal budget.
   2. Take actions needed to minimized federal and state income taxes.
   3. Make the rent/buy decision regarding housing during work years and in retirement.
   4. Obtain appropriate insurance relating to health, home, and auto and life coverage.
5. Develop a strategy for acquisition of stocks, bonds, and mutual funds and for the rebuilding of one’s portfolio, both through defined-contribution pensions and through standard brokerage accounts.
6. Write a will, with professional guidance, arranging for distribution of assets after death.

H. Program Competencies: To assist the adult learner to attain an academic degree.

I. SUNY General Education Knowledge and Skills Areas: N/A

J. ECC Learning Outcomes:
   1. Communication (Level 1): Outcomes 1 through 3.
   2. Information Literacy (Level 1): Outcomes 5 (Quantitative Reasoning).
   3. Critical Analysis and Reasoning (Level 1).
   4. General Educations Requirements (SUNY).

K. Student Learning:
   1. Evaluation of Learning: The adult learner will be presented with in-class learning and written assignments, tests, quizzes and daily assignments, mid-term assessment of knowledge.
   2. Assessment of Learning /Outcome Measurement: The adult learner will be assessed at the beginning of the training to ascertain existing knowledge in the area of study, and conclude with an assessment to measure knowledge growth and improvement.

L. Attendance Policy/Repetition: The adult learner is expected to attend all training sessions, with a minimum of 75% class attendance. The adult learner may repeat the training a maximum of two times per subject, per year; subject to a change in curriculum.

M. Library Resources: Instructors will define a collection of library resources appropriate to the learner’s academic area of interest.
N. Topical Outline:

1. Personal budget
2. Federal and state income tax concerns
3. Credit and debit card selection and management
4. Installment credit and leasing
5. Residence selection (buy vs. rent)
6. Property and liability insurance
7. Life and health insurance
8. Tax deferral options (401(k), 403(b), IRA, etc…)
9. The stock market
10. Bonds and mutual funds
11. Real estate investments
12. Collectibles (metals, diamonds, and misc…)
13. Estate planning
14. Post-test


Date: August 2014

Last update: October 30, 2014
Course: NCR-233 Introduction to Consumer Finance


Assessment: Test of Adult Basic Education (TABE), to include:
- Pre-test TABE 9 for Mathematical Computations
- Pre-test TABE 9 for Applied Mathematics
- Post-test TABE 10 for Mathematical Computations
- Post-test TABE 10 for Applied Mathematics

Coursework: Personal budgeting
- Federal and state income tax preparation and management
- Credit and debit card use
- Auto purchase decisions
- Residential buy and or rent decisions
- Property and casualty insurance
- Life and health insurance
- Stock, bond and mutual fund investment
- Defined-contribution pension planning
- Real estate, collectible and other speculative investments
- Estate planning

Attendance: The adult learner is expected to attend all training sessions, with a minimum of 75% class attendance. The adult learner may repeat the training a maximum of two times per subject, per year; subject to a change in curriculum.
Assignments: The adult learner will be presented with in-class learning and written assignments, tests, quizzes and daily assignments, mid-term assessment of knowledge.

Evaluation: The adult learner will be assessed at the beginning of the training to ascertain existing knowledge in the area of study, and conclude with an assessment to measure knowledge growth and improvement.

Expectations: The adult learner will have a fundamental understanding of both the simple and the complex financial decisions that Americans must confront today in the future.
All adult learners will be given a pre-test on the first day of instruction. This pre-test may include multiple choice, true/false and or quantitative responses. On the last day of the course, a similar, but not identical post-test will be administered and graded.

Pre-test and post-test results will be compared for each adult learner. If post-test results are roughly equal to or lower than pre-test results, attempts will be made to ascertain why progress was not achieved. Where substantial progress was observed, and effort will also be made to identify need areas with the goal of improving delivery methods.

Results will be recorded and retained to use to improve both the instructional methodology of the lectures and the design of the testing used.

Assessments used: Test of Adult Basic Education (TABE), to include:
- Pre-Test TABE 9 for Reading
- Pre-Test TABE 9 for Language
- Pre-Test TABE 9 for Vocabulary
- Pre-Test TABE 9 for Language Mechanics
- Pre-Test TABE 9 for Spelling
- Post-Test TABE 10 for Reading
- Post-Test TABE 10 for Language
- Post-Test TABE 10 for Vocabulary
- Post-Test TABE 10 for Language Mechanics
- Post-Test TABE 10 for Spelling
# 2014-2015 COURSE ROSTER

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Start Date</th>
<th>Campus</th>
<th>Room</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Home Phone</th>
<th>Business Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total: ______________

Page 1 of 1
Course Name ___________________________________ Course No ____________________

Campus _____________________________ Instructor ____________________

Start Date __________________________ Room ____________________

Last Name ____________________________________________________________

First Name: ____________________________

Signature: ______________________________

Date: _________________________________

Email address: _______________________________________________________

Last Name ____________________________________________________________

First Name: ____________________________

Signature: ______________________________

Date: _________________________________

Email address: _______________________________________________________

Last Name ____________________________________________________________

First Name: ____________________________

Signature: ______________________________

Date: _________________________________

Email address: _______________________________________________________

Last Name ____________________________________________________________

First Name: ____________________________

Signature: ______________________________

Date: _________________________________

Email address: _______________________________________________________
NON-CREDIT COURSE EVALUATION

Instructor ___________________________ Date __________________
Course ___________________________ Location __________________

1. Did this course meet your expectations? □ Yes □ No
2. Could any part of the presentation be improved? □ Yes □ No
3. Would you recommend this course to a co-worker or friend? □ Yes □ No
4. Have you ever visited Workforce Development/Community Education website at www.ecc.edu? □ Yes □ No
5. Does your profession require continuing education? □ Yes □ No
   If yes, what is your profession ___________________________
6. How did you hear about this course? □ Course Brochure □ Website □ Postcard
   □ Newspaper □ Radio □ Other

INSTRUCTOR RATING AND EVALUATION

1. What was the quality of the instructor's presentation? □ Poor □ Good □ Excellent
2. Rate the instructor's course preparation? □ Poor □ Good □ Excellent
3. What was the quality of the course materials? □ Poor □ Good □ Excellent
4. Rate the course materials (relevant and up-to-date) □ Poor □ Good □ Excellent

Additional Comments (what you liked, improvements, any course suggestions)
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Please list anyone you think may want to receive a course brochure or e-communication.

Name ________________________________________________________________
Address __________________________________________________________________
City __________________________________ State ________ Zip ___________
Email ________________________________________________________________

Erie Community College is an Equal Opportunity Employer. We request your voluntary completion of the following questions which will be used only for the purpose of monitoring the success of our Affirmative Action Plan. Please identify yourself as a member of a racial ethnic group as indicated here:

01) □ White 02) □ Black 03) □ Hispanic 04) □ Asian/Pacific
05) □ Native American or Alaskan Native 06) □ Non-Resident Alien

Age Group □ (18-25) □ (26-35) □ (36-45) □ (46-55) □ (55-63) □ (64+) □ Male □ Female
Which of these expressions has the same value as the expression in the box?

\[
\begin{align*}
10 + 3 & \\
3 + 10 & = 13 & 10 - 3 & = 7 & 13 - 3 & = 10 & 7 + 3 & = 10
\end{align*}
\]

A B C D

1. Where do two perpendicular lines intersect?
   A. point
   B. segment
   C. ray
   D. line

2. Which of these cylinders is about 25% full?

   F
   G
   H
   J
3  It cost $526.30 to repair Carol's car. Rounded to the nearest ten dollars, how much did Carol pay?
   A  $500
   B  $520
   C  $530
   D  $550

4  Which of these numbers should go in the box to make the equation true?

\[(6 \times 3) \times (4 + 1) = 6 \times \boxed{5}\]

   F  3
   G  4
   H  12
   J  18

5  In which of these pairs of numbers are both numbers equivalent to \(\frac{1}{4}\)?

   A  25%, 0.25
   B  14%, 0.14
   C  25%, 0.025
   D  40%, 0.40

6  Bob's Diner opens every morning at 7:00 a.m. and closes at 8:30 p.m. How long is the diner open each day?
   F  10 hours 30 minutes
   G  12 hours 30 minutes
   H  13 hours 30 minutes
   J  14 hours 30 minutes

7  How can 8 ounces be expressed in pounds?
   A  \(\frac{1}{4}\) pound
   B  \(\frac{1}{2}\) pound
   C  1 pound
   D  2 pounds

8  Rachael has a coupon for 15% off her total lunch bill before tax. If \(t\) represents the total cost of her lunch items before tax, which of these expressions represents the savings from the coupon?
   F  \(t \cdot 0.15\)
   G  \(t \times 0.15\)
   H  \(t : 0.15\)
   J  \(t + 0.15\)
An automobile manufacturer published a graph showing the colors of a specific model of car sold in one year. Study the graph. Then do Numbers 9 through 11.

![Car Colors Graph]

9  According to the graph and the variables given below, which inequality is correct?

Let:
\[ r = \text{percent of people who bought red cars} \]
\[ b = \text{percent of people who bought blue cars} \]
\[ g = \text{percent of people who bought green cars} \]

A  \( r > g \)
B  \( r > b + g \)
C  \( b > g \)
D  \( g - r > b \)

10  What was the least popular car color?
F  green
G  red
H  blue
J  white

11  According to the graph, which of these is a correct statement?
A  Red, green, and black make up half the cars sold.
B  More than half the cars sold were red, white, or blue.
C  The number of gray cars sold was less than the number of green cars sold.
D  There were fewer green cars sold than red cars.
The table shows the cost of producing one hammer at the Hudson Hardware Company. Study the table. Then do Numbers 12 and 13.

### Production Cost of One Hammer

<table>
<thead>
<tr>
<th>Material</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood</td>
<td>0.75</td>
</tr>
<tr>
<td>Metal</td>
<td>2.25</td>
</tr>
<tr>
<td>Labor</td>
<td>4.00</td>
</tr>
</tbody>
</table>

12. The Hudson Hardware Company sells one hammer for $20.00. How much money is left after the cost of labor and materials is deducted from the selling price?
   - F $13.00
   - G $16.00
   - H $17.00
   - J $27.00

13. Which expression can be used to find the total cost of materials and labor needed to produce \( n \) hammers?
   - A \( 7 + n \)
   - B \( 7n \)
   - C \( 3n \)
   - D \( n + 3 \)

14. Which of these shapes is a four-sided figure with only one pair of parallel sides?
   - F trapezoid
   - G rectangle
   - H square
   - J rhombus
The bar graph below shows the interest rates on personal loans at several banks for one week in March. Study the graph. Then do Numbers 15 through 17.

15 Amy took out a loan at Valley Bank. What rate of interest was she charged?
   A 9.4%
   B 9.5%
   C 9.25%
   D 9.75%

16 The Neighborhood Bank offers a lower rate on commercial accounts than on personal accounts. If the commercial rate is 1.25% lower than the personal rate, what is the rate for commercial accounts?
   F 8.0%
   G 8.5%
   H 9.5%
   J 9.75%

17 Which of these statements best describes the bank interest rates shown on the graph?
   A The average interest rate at the four banks is about 9%.
   B The difference between the highest rate and lowest rate is less than 1%.
   C All the bank interest rates are higher than 9.75%.
   D The average interest rate at the four banks is about 10%.

18 In which of these pairs of numbers would both numbers round to 6.23?
   F 6.232 and 6.236
   G 6.231 and 6.233
   H 6.229 and 6.239
   J 6.222 and 6.238
### Mathematics Computation

#### Sample A

**1.**

\[
12 + 7 = 
\]

- A. 19
- B. 15
- C. 10
- D. 20
- E. None of these

**2.**

\[
475 \times 9 = 
\]

- F. 76
- G. 806
- H. 86
- J. 860
- K. None of these

**3.**

\[
\]

- A. 1,078
- B. 5,819
- C. 4,949
- D. 5,929
- E. None of these

**4.**

\[
473 \div 3 = 
\]

- F. 17 R 5
- G. 15 R 3
- H. 10 R 3
- J. 18 R 1
- K. None of these
5

208 × 8 =

A 1,604
B 1,616
C 2,206
D 1,664
E None of these

6

2 1/2

F 2
G 2 1/4
H 3
J 2 1/2
K None of these

7

$764.00 + $0.58 =

A $764.58
B $822.00
C $765.58
D $864.58
E None of these

8

2.9 × 9 =

F 2.61
G 26.1
H 18.81
J 28.1
K None of these

9

A $73.11
B $183.11
C $84.11
D $83.11
E None of these

$104.06 - $20.95 =

10

8,113

F 584,136
G 73,017
H 573,036
J 219,051
K None of these

21

11

$764.58 $765.58 $864.58

A $764.58
B $822.00
C $765.58
D $864.58
E None of these

12

F 1/16
G 1
H 3/16
J 1/2
K None of these
13

A 7
B 0
C 1
D 7
E None of these

\[ 0 \div 7 = \]

14

F 40
G 4
H 0
J 40
K None of these

\[ -4 \times 0 = \]

15

A 0.41
B 0.45
C 0.045
D 4.50
E None of these

\[ 5 \div 2.25 \]

16

F 5
G 4\( \frac{1}{5} \)
H 4
J 3\( \frac{1}{5} \)
K None of these

\[ \frac{4}{5} \div \frac{1}{5} \]

17

A 810 R 3
B 873
C 880 R 3
D 885
E None of these

\[ 5,283 \div 6 = \]

18

F 7
G 1
H -1
J -7
K None of these

\[ 3 + -4 = \]

19

A 4.0
B 0.01
C 0.4
D 1.0
E None of these

\[ 20 \% \text{ of } 20 = \]

20

A 8\( \frac{1}{20} \)
B 8\( \frac{1}{10} \)
C 8\( \frac{1}{5} \)
D 8\( \frac{2}{5} \)
E None of these

\[ 3 \frac{1}{10} + 5 \frac{1}{10} = \]

Page 18 | Mathematics Computation
21
What is 80% of $5.00?

A $0.40
B $4.00
C $4.20
D $5.80
E None of these

22
-1 × -12 =

F 13
G 12
H -12
J 13
K None of these

23
2.5% of 100 =

A 0.025
B 0.25
C 2.5
D 25.0
E None of these

24
-3 - -2 =

F -1
G 5
H 1
J -5
K None of these

25
16% of □ = $32

A $200
B $16
C $48
D $2
E None of these
Which of these expressions has the same value as the expression in the box?

\[
\begin{array}{cccc}
10 + 3 & 3 + 10 & 10 - 3 & 13 - 3 & 7 + 3 \\
A & B & C & D
\end{array}
\]

1. Which point on the number line indicates a number that is less than 9.1 and greater than 6.5?

   - A  Point R
   - B  Point Q
   - C  Point P
   - D  Point S

2. Which of these numbers is the same as 34.921 rounded to the nearest thousand?

   - F  30,000
   - G  34,000
   - H  34,900
   - J  35,000
The line graph below shows sales for a local bookstore over a period of 6 years. Study the graph. Then do Numbers 3 through 5.

![Book Sales Graph]

3. What was the total in sales for Year 5?
   A. $60,000  
   B. $65,000  
   C. $70,000  
   D. $75,000  

4. In what year did the bookstore have sales of approximately $75,000?
   F. Year 3  
   G. Year 4  
   H. Year 5  
   J. Year 6  

5. Last month, 5,389 people shopped at the bookstore. What is this number rounded to the nearest hundred?
   A. 5,400  
   B. 5,300  
   C. 5,000  
   D. 5,500
The table below shows workers' average wages at manufacturing plants in four regions of the country. Study the table. Then do Numbers 6 and 7.

### Workers' Average Wages (per hour)

<table>
<thead>
<tr>
<th>Plant Location</th>
<th>Last Year</th>
<th>This Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Region</td>
<td>$18.75</td>
<td>$20.50</td>
</tr>
<tr>
<td>Northern Region</td>
<td>$20.00</td>
<td>$22.00</td>
</tr>
<tr>
<td>Southern Region</td>
<td>$21.50</td>
<td>$21.50</td>
</tr>
<tr>
<td>Western Region</td>
<td>$19.95</td>
<td>$23.80</td>
</tr>
</tbody>
</table>

6. What is the average hourly wage this year in the Northern Region?
   - F $18.75
   - G $20.00
   - H $20.50
   - J $22.00

7. About how much did the average hourly wage increase from last year to this year for workers in the Western Region?
   - A $3.00 per hour
   - B $4.00 per hour
   - C $20.00 per hour
   - D $24.00 per hour
Bradley's Furniture is having a spring sale. Study the information in the advertisement. Then do Numbers 8 through 10.

Bradley's Furniture
Spring Sale

5-Piece Living Room Set
Purchase Today for $895!

Finance Plan:
5% down and 12 easy monthly payments.

*Each payment includes a $14.00 finance charge.

8 Julie decided to buy the living room set using the finance plan. She made a down payment of 5% of the purchase price. About how much was Julie's down payment?
   F $5.00
   G $50.00
   H $400.00
   J $450.00

9 Which of these is not needed to find out how much it will cost to finance the living room set?
   A the number of monthly payments
   B the finance charge with each payment
   C the amount of money toward a down payment
   D the number of years the furniture will be owned

10 A competitor of Bradley’s Furniture is selling the same 5-piece living room set. The competitor offers customers the following payment option: $500 down payment, then $20 per month for 24 months. What is the total cost of the set?
   F $544
   G $580
   H $980
   J $2,420
Each vertex on the figure below is labeled. The length of each side is shown. Study the figure. Then do Numbers 11 through 13.

![Diagram of a 3D figure with labeled vertices and dimensions]

11. How many faces does the figure have?
A. 4  
B. 6  
C. 8  
D. 12

12. If segment $MO$ is drawn in the figure, what will be the area ($A$) of triangle $MOP$?
   
   ($A = \frac{1}{2} bh$)
   
   F. 8 square inches  
   G. 12 square inches  
   H. 16 square inches  
   J. 32 square inches

13. Which line segments in the figure are perpendicular?
   
   A. $MN$ and $OP$  
   B. $NO$ and $RS$  
   C. $OP$ and $TS$  
   D. $QR$ and $QT$

14. A computer program applies a certain rule to any number that the user inputs. A sample of input and output numbers is shown in the table below.

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0.4</td>
</tr>
<tr>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td>4</td>
<td>0.8</td>
</tr>
<tr>
<td>5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

What rule does the program apply to the input number to generate the output number?

F. multiply by 2.0  
G. subtract 1.6  
H. divide by 0.2  
J. multiply by 0.2
15. The Robinsons want to plant trees in their yard. It will take about 15 minutes to plant each tree. At this rate, how long will it take them to plant 8 trees?
   A. 2 hours
   B. 3 hours
   C. 1 hour 20 minutes
   D. 1 hour 35 minutes

16. What is the value of \( p \) in the inequality in the box?
   \[
   p \quad 3 > 8
   \]
   F. \( p < 5 \)
   G. \( p = 11 \)
   H. \( p > 5 \)
   J. \( p > 11 \)

17. Which of these is a true statement about the measure of angle \( R \)?
   A. Angle \( R \) is greater than 90 degrees.
   B. Angle \( R \) is greater than 180 degrees.
   C. Angle \( R \) is an acute angle.
   D. Angle \( R \) is a right angle.

18. What is the name of the figure formed by the intersection of the two quadrilaterals below?
   F. triangle
   G. trapezoid
   H. rectangle
   J. hexagon
**Sample A**

12 + 7 =

A 19  
B 15  
C 10  
D 20  
E None of these

1

414 × 3 =

A 1,232  
B 1,444  
C 1,252  
D 1,242  
E None of these

2

9,118 × 5 =

F 45,550  
G 55,590  
H 45,590  
J 45,690  
K None of these

3

\[
\begin{array}{c}
5 \div 9 \\
= 5 \frac{7}{9} \\
\end{array}
\]

A 5  
B 5 \frac{9}{9}  
C 3 \frac{5}{9}  
D 5 \frac{5}{9}  
E None of these

4

22 × 47 =

F 1,034  
G 188  
H 1,024  
J 242  
K None of these
| 5 | \(8 \div 3 =\) | A | 1 R 5 |
|   |                     | B | 3 R 1 |
|   |                     | C | 2 R 3 |
|   |                     | D | 2 R 2 |
|   |                     | E | None of these |

| 6 | \(-3 + 0 =\) | F | -30 |
|   |                     | G | -3 |
|   |                     | H | 0 |
|   |                     | J | 3 |
|   |                     | K | None of these |

| 7 | \(10 \times 3 =\) | A | -3 |
|   |                     | B | -30 |
|   |                     | C | 3 |
|   |                     | D | 30 |
|   |                     | E | None of these |

| 8 | \(4 \div 1.84 =\) | F | 0.46 |
|   |                     | G | 0.41 |
|   |                     | H | 0.64 |
|   |                     | J | 4.60 |
|   |                     | K | None of these |

| 9 | \(-8 \times 11 =\) | A | -88 |
|   |                     | B | -3 |
|   |                     | C | 88 |
|   |                     | D | 3 |
|   |                     | E | None of these |

| 10 | \(1.080 - 1.068 =\) | F | 0.002 |
|    |                     | G | 0.912 |
|    |                     | H | 0.120 |
|    |                     | J | 0.022 |
|    |                     | K | None of these |

| 11 | \(\frac{1}{2} \times \frac{1}{3} =\) | A | \(\frac{1}{6}\) |
|    |                     | B | \(\frac{1}{5}\) |
|    |                     | C | \(\frac{1}{2}\) |
|    |                     | D | \(\frac{2}{3}\) |
|    |                     | E | None of these |

| 12 | \(125.994 + 16.023 =\) | F | 141.017 |
|    |                     | G | 142.117 |
|    |                     | H | 141.917 |
|    |                     | J | 142.017 |
|    |                     | K | None of these |
### 13

\[
6,480 \div 6 =
\]

| A | 108 |
| B | 180 |
| C | 1,080 |
| D | 1,008 |
| E | None of these |

### 14

\[
\begin{array}{c}
949 \\
\times 30
\end{array}
\]

| F | 27,470 |
| G | 27,147 |
| H | 28,470 |
| J | 29,419 |
| K | None of these |

### 15

\[
8 \overline{634}
\]

| A | 140 |
| B | 14 R 2 |
| C | 105 R 6 |
| D | 104 R 2 |
| E | None of these |

### 16

\[
1,000 \div 100 =
\]

| F | 100 |
| G | 10 |
| H | 100,000 |
| J | 10 |
| K | None of these |

### 17

\[
1\% \text{ of } 100 =
\]

| A | 1 |
| B | 10 |
| C | 100 |
| D | 101 |
| E | None of these |

### 18

\[
48 \overline{816}
\]

| F | 22 |
| G | 12 |
| H | 17 |
| J | 20 |
| K | None of these |

### 19

\[
6.2
\]

| A | 1.922 |
| B | 19.22 |
| C | 192.2 |
| D | 1,922 |
| E | None of these |

### 20

What is 100\% of 19?

| F | 0.19 |
| G | 1.0 |
| H | 10 |
| J | 19 |
| K | None of these |
### Question 21

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$\frac{5}{16}$</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>$\frac{5}{8}$</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>$1\frac{1}{16}$</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>$\frac{16}{17}$</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>None of these</td>
<td></td>
</tr>
</tbody>
</table>

### Question 22

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>$\frac{1}{8}$</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>$\frac{1}{4}$</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>None of these</td>
<td></td>
</tr>
</tbody>
</table>

### Question 23

What percent of 100 is 8?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>92%</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>12.5%</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>None of these</td>
<td></td>
</tr>
</tbody>
</table>

### Question 24

3. 5 =

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>None of these</td>
<td></td>
</tr>
</tbody>
</table>

### Question 25

40% of [ ] = $10.00

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$0.25$</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>$4.00$</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>$25.00$</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>$40.00$</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>None of these</td>
<td></td>
</tr>
</tbody>
</table>