

# PRACTICE ASSESSMENT FOR ENTRY IN MATH 10

## INSTRUCTIONS:

- ◆ Answer as many questions as you can.
- ◆ Please show ALL your work on this sheet.
- ◆ Calculators are NOT permitted.

If you forget how to do something, the practice assessment includes links to videos that will help you answer the question. You may wish to maximize the videos on your computer screen.

## Section A – Fundamental (BMTH 021)

A.1 Write a numeral for this word name:

two hundred four thousand, eighty-two

[Click Here for a Worksheet for this Type of Problem](#)

See answer on page 5

A.2 Draw a box around the largest number:

1955          2554          568          2801

See answer on page 5

A.3 Round 24,259 to the nearest hundred:

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A.5 Write these common fractions as decimals.

a)  $\frac{1}{2}$

b)  $\frac{17}{9}$

c)  $\frac{30}{1000}$

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**A.6** Mike built a rectangular dog pen that is 21 feet long and has a perimeter of 78 feet. What is the width of Mike's dog pen?

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## Section B - Operations

[Click Here to Start Studying Basic Operations from the Beginning](#)

**B.1** Add  $709 + 996$

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**B.2** Subtract  $9,601 - 8,023$

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**B.3** Multiply a) 
$$\begin{array}{r} 32 \\ \times 18 \\ \hline \end{array}$$

b) 
$$\begin{array}{r} 99 \\ \times 88 \\ \hline \end{array}$$

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**B.4** Divide  $7182 \div 42$

[Click Here for the Video Solution](#)

**B.5** Calculate the following.  $8 + (5)(4) - (6 + 10 \div 2) + 44$

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## Section C – Fractions

[Click Here to Start Studying Fractions from the Beginning](#)

**C.1 Add then reduce the answer to lowest terms.**

$$19\frac{3}{18} + 18\frac{2}{3}$$

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**C.2 Subtract then reduce the answer to lowest terms.**

$$7\frac{6}{9} - 3\frac{2}{5}$$

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**C.3 Multiply then reduce the answer to the lowest terms.**

$$\frac{2}{3} \times \frac{4}{5}$$

[Click Here for the Video Solution](#)

**C.4 Divide then reduce the answer to the lowest terms.**

$$\frac{2}{5} \div \frac{7}{3}$$

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**C.5 Katie and Tyler are working at their lemonade stand. An hour ago, their pitcher of lemonade was  $\frac{7}{8}$  full. Since then, they have sold  $\frac{1}{2}$  of a pitcher of lemonade. What fraction of a pitcher of lemonade do they have left?**

See answer on page 5

[Click Here for the Solution to a Similar Problem](#)

Section D – Fundamental Part 2

D.1 Convert to a decimal: 59.2%

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D.2 Convert to a percent: 1.501

[Click Here for the Video Solution](#)

D.3 You invested \$95.00 in the stock market (your portfolio) and your investment grew by 15%. How much money do you have now?

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D.4 Find  $n$   $\frac{8}{36} = \frac{10}{n}$

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D.5 A recipe for oatmeal cookies calls for 2 cups of flour for every 3 cups of oatmeal. How much flour is needed for a big batch of cookies that uses 9 cups of oatmeal?

[Click Here for the Video Solution](#)

D.6 Evaluate  $5^3 =$

[Click Here for the Video Solution](#)

D.7 Evaluate  $\sqrt{100} =$

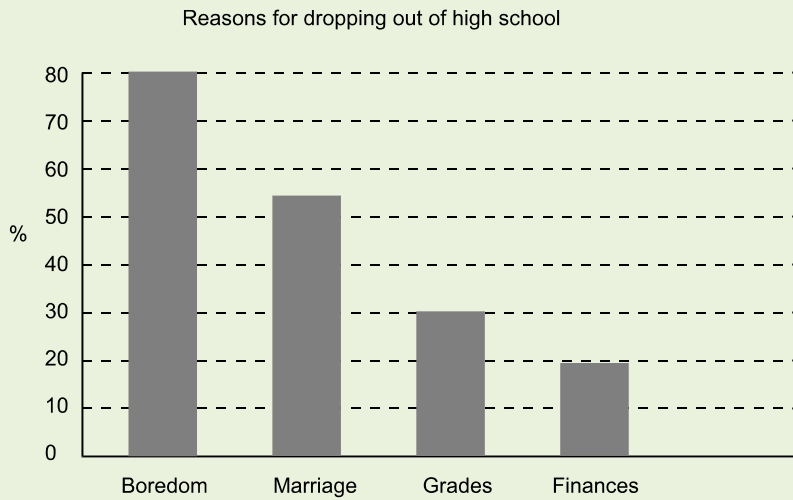
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D.8 The number of hours of screen time viewed on all electronic devices per week for one person for 8 weeks is: 23, 29, 20, 32, 23, 21, 33, 25.

Find the mean (average), median, and mode.

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**D.9 Use this bar graph to answer the following questions (respondents could select more than one answer):**



**a. What reason was most common for dropping out?**

**b. What percentage dropped out because of grades?**

See answer on page 5

Answers:

A1 – 204,082    A2 – 2,801 is the largest number

C5 -  $\frac{3}{8}$

D9 - a) boredom    b) 30%

# PRACTICE ASSESSMENT FOR ENTRY IN MATH 11

## INSTRUCTIONS:

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### Section E- Intermediate Algebra 1 (BMTH 033)

E.1 Evaluate the expression  $a^2 + 10b - 8$

when  $a = 7$  and  $b = -4$

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E.2 Simplify a)  $2(3x + 5)$

b)  $7(3y - 5) - 2(10+4y)$

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E.3 Solve  $5x - 11 = 42$

[Click Here for the Video Solution](#)

E.4 Solve for  $L$   $P = 2L + 2W$

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E.5 Simplify  $\sqrt[3]{64a^6b^3c^9}$

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E.6 Simplify  $(xy)^{-2} \left(\frac{2x^2}{y}\right)^4$

[Click Here for the Video Solution](#)

E. 7 Expand and simplify  $(3x + 2)(5x - 7)$

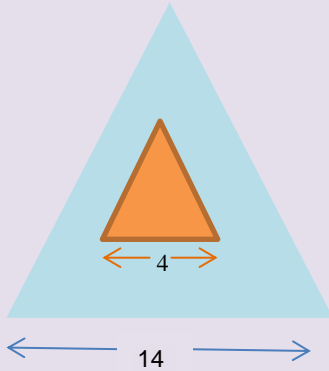
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E.8 Simplify  $\frac{6m}{7m^2n} - \frac{5n^3}{3mn^4}$

[Click Here for the Video Solution](#)

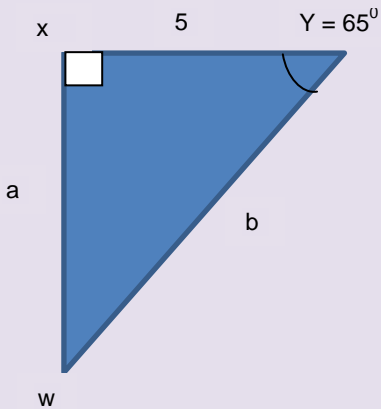
Section F- Intermediate Algebra 2 (BMTH 034)

F.1 The 2 triangles below are equilateral (the length of each of the sides are the same). Find the area of the region shaded in blue if the smaller triangle has side length = 4 and the bigger triangle has side length = 14.



[Click Here for the Video Solution](#)

F.2 Find the unknown sides (a and b) and angles (x and w) of the following right triangle to the nearest tenth.



[Click Here for the Video Solution](#)



F.3 Expand  $(7x + 10)^2$

[Click Here for the Video Solution](#)

F.4 Factor completely

$$45x^2 - 125$$

[Click here for the Video Solution](#)

F.5 Factor completely

$$t^2 + 8t + 15$$

[Click here for the Video Solution](#)

F.6 Solve  $s^2 - 2s - 35 = 0$

[Click here for the Video Solution](#)

F.7 Solve this system of equations (i.e. find one value for both x and y that will satisfy both equations)

$$x + 2y = 9$$

$$3x + 5y = 20$$

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F.8 A line has a slope of  $\frac{-3}{4}$  and goes through the point (0, 8).

What is the equation of this line?

Graph the line below.

[Click here for the Video Solution](#)

