ARE YOU PREPARED?

✓ This mini quiz is meant to serve only as an indicator of a few of the math skills that you are expected to know at the beginning of this course. Do not use these problems as a study guide thinking that they will adequately prepare you for the course.

✓ These example problems are merely representative of some of the most important concepts that are taught in the prerequisite courses.

✓ The course will offer little or no time for any type of review; it assumes that you are prepared to do the work the first day of class.
Below are some of the major topics that are covered in MATH 20.

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Fractions & Decimals
- Addition, subtraction, multiplication, & division

Statistics
- Mean, median, and mode

Ratio & Proportion

Percents
- Percents ↔ decimals ↔ fractions

Measurements
- Metric system ↔ English system

Geometry

Integers

To be successful studying the topics covered in this course, students should be appropriately prepared by: #1 Taking the prerequisite math course within the last three years with a passing grade of A or B, or within the last one year with a passing grade of C, or #2 placing into the course by the ASSET placement test.
Below is a sample of some skills you should have **BEFORE** entering MATH 20.

You **MAY NOT** use a calculator

1. Without using a calculator, can you complete these problems in **45 seconds**?

   - $6 \times 4$
   - $9 \times 6$
   - $7 \times 8$
   - $9 \times 9$
   - $0 \times 6$
   - $6 \times 9$
   - $8 \times 10$
   - $9 \times 4$
   - $6 \times 7$
   - $7 \times 2$
   - $9 \times 0$
   - $6 \times 2$
   - $4 \times 7$
   - $8 \times 9$
   - $9 \times 7$
   - $6 \times 5$
   - $8 \times 9$
   - $8 \times 4$
   - $3 \times 6$
   - $8 \times 8$
   - $12 \div 4$
   - $56 \div 8$
   - $72 \div 9$
   - $40 \div 5$
   - $36 \div 6$

**NOTE:** If you miss more than 5 problems, then you should consider taking the previous math course – MTH 10B, 11B, or ALC 62.

2. Without using a calculator, can you get at least 8 correct answers on the following problems?

   - a) $20 \times 30$
   - b) $25 + 4 + 125$
   - c) $872 - 431$
   - d) $4984 \div 8$
   - e) $68 \times 34$
   - f) $17575 \div 25$
   - g) $305 \times 27$
   - h) $5843 - 2338$
   - i) $4590 \div 15$
   - j) $45 + 2,341 + 8 + 124$

3. **Without using a calculator, can you get at least 4 correct answers on the following problems?**

   - a) Find the change from a $20 bill after purchasing 2 records at $6 each, and 1 pair of earrings that cost $3.
   - b) A computer screen consists of small rectangular dots called *pixels*. How many pixels are there on a screen that has 600 rows with 800 pixels in each row?
   - c) Before going back to college, David buys 4 shirts at $59 each and 6 pairs of pants at $78 each. What is the total cost of the purchase?
d) Portland community college is constructing new dorms. Each dorm room has a small kitchen. If someone buys 85 microwave ovens at $90 each, what is the total cost of the purchase?

e) Hershey Chocolate USA makes small, fun-size chocolate bars. How many 20-bar packages can be filled with 8,110 bars? How many bars will be left over?

ANSWERS

QUESTION 2:

a) 600  
b) 154  
c) 441

d) 623  
e) 2,312  
f) 703

g) 8,235  
h) 3,505  
i) 306

j) 2,518

QUESTION 3:

a) $5  
b) 480,000 PIXELS  
c) $704

d) $7,650  
e) 405 Packages with 10 bars left over

How many of these problems can you miss and still succeed in MATH 20?

Ideally, NONE.

These problems are just a sample of the larger number of skills that you should be familiar with BEFORE taking this course.

If some of these ideas are not familiar to you, you should consider enrolling in one of the previous math courses (MTH 10B, 11B, or ALC 62).