Math 1901 Readiness Self-Assessment

This self-assessment should be completed before starting your MATH 1901 course. Without strong basic math skills, this course can be very challenging! There are 30 questions. You can mark the assessment yourself using the answer key provided:

- If you score below 50% (14 marks or less), then it is strongly recommended that you consider withdrawing from the course, updating your basic math skills through tutoring or a course such as one of the tuition-free University Preparation math courses at TRU (MATH 0400, MATH 0410, and/or MATH 0510), and re-enrolling in MATH 1901 at a later date.

- If you score between 50% and 70% (15-21 marks), you may be OK remaining in the course, but you might consider engaging a tutor to increase your chances of a success.

- If you score above 70% (22 marks or more), you are probably ready to take this course in terms of your basic math skills. Obtaining a high score on this self-assessment is no guarantee of success in the course, however.

Note that your score on this self-assessment can only be seen by you. Your Open Learning Faculty Member does not have access to your self-assessment or your score.

Calculate the answers to the following questions by hand **without using a calculator**. There is no time limit for this assessment, but you should complete it in one sitting.

1. Calculate $-1 - (-6)$.

2. Calculate $(-2) \times (-5)$.

3. Calculate $8 \div (-4)$.

4. Calculate $\frac{5}{6} - \frac{3}{4}$. Express your answer as a fraction reduced to simplest form (lowest terms).

5. Calculate $\frac{3}{4} \div \frac{7}{8}$. Express your answer as a fraction reduced to simplest form.

6. Calculate $\frac{3}{5} \times \frac{5}{9}$. Express your answer as a fraction reduced to simplest form.

7. Calculate $56 + 17$.

8. Calculate $56 - 17$.

9. Calculate 41×23.

10. Calculate $456 \div 6$.

11. Calculate $0.75 + 3.6$.

12. Calculate 0.4×2.1.

13. Calculate $3.63 \div 0.3$.

14. Calculate $6 + 24 \div 8 - 5$.

15. Calculate $(3 + 2) \times 8 \div 4 - 2$.

16. Round 7.81662 to the nearest thousandth.

17. Which one of the following is true?

      a. $-16 < 10$

      b. $-16 = 10$

      c. $-16 > 10$

18. Which one of the following is true?

      a. $\frac{2}{5} < \frac{3}{8}$

      b. $\frac{2}{5} = \frac{3}{8}$

      c. $\frac{2}{5} > \frac{3}{8}$

19. Which of the following powers of prime numbers are in the prime factorization of 270? (Select all that apply.)

      a. 2^1

      b. 2^2

      c. 3^3

      d. 5^1

      e. 7^1

20. What is the greatest common factor (GCF) of 36 and 270?

21. What is the least common multiple (LCM) of 36 and 270?

22. Express the mixed number $1\frac{3}{5}$ as an improper fraction.

23. Express the improper fraction $\frac{9}{4}$ as a mixed number.

24. What is 14 as a percent of 50?

25. What is 45 percent of 40?

26. Express 54 percent as a fraction in simplest form.

27. Express 0.16 as a fraction in simplest form.

28. Express $\frac{9}{25}$ as a percent.

29. Convert 270 metres to kilometres.

30. Convert 0.35 kilograms to grams.