

SAMPLE MATHEMATICS PLACEMENT TEST

This is a sample of the types of questions that comprise the UWI-ROYTEC Mathematics Placement Test. These questions are to be completed without the use of a calculator!

- 1) The prime factors of 12 are
A) {1, 2, 3} B) {2, 3} C) {1, 2, 3, 4} D) {1, 2, 3, 4, 6, 12}
- 2) The highest common factor of the numbers 12, 18 and 42 is
A) 1 B) 2 C) 3 D) 6
- 3) The set of multiples of 3 is
A) {1, 3} B) {1, 2, 3, ...} C) {3, 6, 9, ...} D) {3, 9, 27, ...}
- 4) The number of significant figures in the number 305,007 is
A) 3 B) 4 C) 5 D) 6
- 5) Which ratio is equivalent to 10 : 15 : 20?
A) 2 : 3 : 4 B) 2 : 3 : 5 C) 5 : 10 : 15 D) 20 : 25 : 30
- 6) Which of the following fractions is equal to $\frac{4}{9}$?
A) $\frac{4}{36}$ B) $\frac{20}{90}$ C) $\frac{12}{27}$ D) $\frac{52}{118}$
- 7) $\frac{9}{10}$ as a percentage is
A) 0.9% B) 9% C) 90% D) 99%
- 8) What is 15% of 300?
A) 45 B) 75 C) 90 D) 315
- 9) 0.02×1.25
A) 0.0025 B) 0.025 C) 0.225 D) 0.25

- 10) What is 0.005782 rounded to the nearest hundredth?
A) 0.01 B) 0.006 C) 0.0058 D) 0.00578
- 11) $(2)^3 + (3)^2 =$
A) 25 B) 125 C) 12 D) 17
- 12) The value of $-5 - (-5) =$
A) 10 B) -10 C) 0 D) 25
- 13) $12 - 6 \times 3 + 12 \div 6 =$
A) -4 B) 5 C) 1 D) 4
- 14) $|2 + 7 \times -1|$
A) -9 B) 8 C) -5 D) 5
- 15) What is the value of the expression $(x - y)^2$ when $x = 5$ and $y = -1$?
A) 4 B) 16 C) 24 D) 36
- 16) The Lowest Common Multiple of a^2bc^2 and ab^2 is
A) ab B) a^2b C) ab^2 D) $a^2b^2c^2$
- 17) $\frac{1}{2}(a + b) = \frac{1}{2}a + \frac{1}{2}b$ satisfies the
A) commutative law B) associative law
C) distributive law D) closure law
- 18) A book and a pen together cost \$24.00. If the book costs \$6.00 more than the pen, find the cost of the book.
A) \$6.00 B) \$8.00 C) \$9.00 D) \$15.00