



Jakarta International  
School  
6<sup>th</sup> Grade  
Practice test-1  
Fractions- Black

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score:  $\frac{\quad}{28}$

**Vocabulary.**

**1)** Fill in the Blanks (1pt each)

- a.** A number is \_\_\_\_\_ if the sum of its proper factors is \_\_\_\_\_ than the number itself.
- b.** A polynomial of three terms is a \_\_\_\_\_

**Rules of Divisibility.**

**2)** Fill in the blanks (with one digit) so that the statements are true: (1pt each)

- a.** \_\_732 is divisible by 11
- b.** \_\_928 is divisible by 13

**Factors and Multiples.** (2pts each)

- 3)** What is the smallest positive integer value of  $n$  such that  $2^n + 5^n + 7^n$  is a multiple of 17?
- 4)** Use each of the digits 3,4,6,8 and 9 only once to create the greatest possible multiple of 6.
- 5)** What is the smallest counting number that has each of the following numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 as factors?

**Prime and composite numbers.**

6) Identify as Prime or Composite: (1pt each)

a. 67 \_\_\_\_\_      b. 187 \_\_\_\_\_      c. 291 \_\_\_\_\_

7) Consider all prime numbers from 1 to 50. Identify 6 pairs of twin primes from this list. Explain the rule of twin primes. (2pts)

**Equivalent Fractions and Simplest form.**

8) Are the 2 given fractions equivalent? Write yes or no (1pt each)

a.  $\frac{78}{306}$ ,  $\frac{13}{51}$

b.  $\frac{2x^5f^6}{7r^3}$ ,  $\frac{14x^3f^7}{28r^3xf}$

9) Simplify. (2pts)

a.  $\frac{14xy^7z^4}{30x^2yz^{11}} =$

**Prime Factorization, GCF & LCM.**

10) Find the GCF and LCM. Use any method, but show your working. (2pts each)

a.  $24x^3y$ ,  $12yz$

GCF: \_\_\_\_\_

LCM: \_\_\_\_\_

b. The GCF of 36 and x is 6. What are the two possible values of x?

- 11)** Christine's Candy Store has 6 very regular customers.  
Customer 1: shops at the store everyday.  
Customer 2: shops at the store every second day.  
Customer 3: shops at the store every third day so on.

How many days from today will all the 6 regular customers shop at the store on the same day?  
(2pts)

- 12)** A travel agent in Sydney sells maps (\$10) and atlases (\$35) to customers travelling to Indonesia. Here are their sales figures for these items for one week recently. One of the figures is wrong. (3pts)

Day	Mon	Tues	Wed	Thurs	Fri
Total Sales	\$35	\$60	\$25	\$55	\$70

- a.** Which day must have incorrect sales figures?
- b.** Which day did they only sell atlases?
- c.** On which day must have they sold both items?