

# Math Study Sheet

## (Term 1)

### Definitions

1. A **prime number** has only two factors: 1 and itself.
2. A **composite number** has more than two factors.
3. **The number 1** is neither prime nor composite.

**To determine if a number is prime or composite, follow these steps:**

1. Find all factors of the number.
2. If the number has only two factors, 1 and itself, then it is prime.
3. If the number has more than two factors, then it is composite.

Example 1: Is the number 2 prime or composite?

Solution: The factors of 2 are  $1 \times 2$   
2 is prime

Example 2:

Is the number 9 prime or composite?

Solution:

The factors of 9 are  $1 \times 9$ ,  $3 \times 3$   
9 is composite

### Practice

Find all prime numbers between 20 and 29.		
factors of 20:		
factors of 21:		
factors of 22:		
factors of 23:		
factors of 24:		
factors of 25:		
factors of 26:		
factors of 27:		
factors of 28:		
factors of 29:		
The prime numbers are		

• **BEDMAS**

- B - Brackets
- Exponents
- Division
- Multiplication
- Addition
- Subtraction

**Solve and show all your work.**

$$(4 - 1 + 8 \div 8) \times 5$$

$$(10 \times 2) \div (1 + 1)$$

$$7 \times 9 - 7 - 3 \times 5$$

$$8 - 1 - (18 - 2) \div 8$$

**Square Roots Find each square root.**

1)  $\sqrt{64}$

2)  $\sqrt{36}$

3)  $\sqrt{49}$

4)  $\sqrt{0}$

5)  $\sqrt{25}$

6)  $\sqrt{1}$

7)  $\sqrt{9}$

8)  $\sqrt{4}$

Show an example of the following:

Brackets \_\_\_\_\_

Exponents \_\_\_\_\_

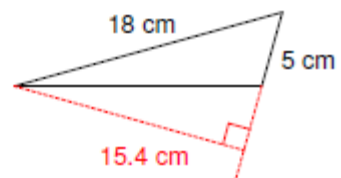
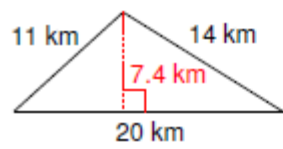
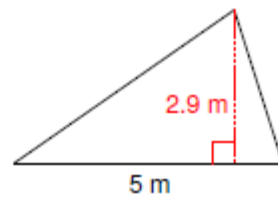
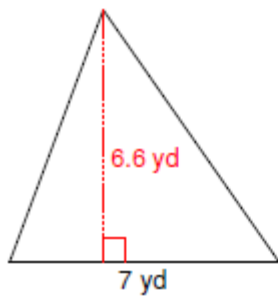
Power \_\_\_\_\_

Expression \_\_\_\_\_

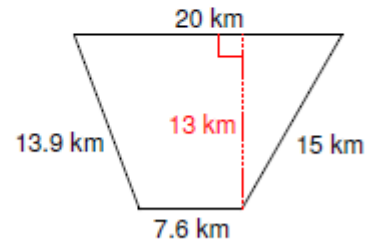
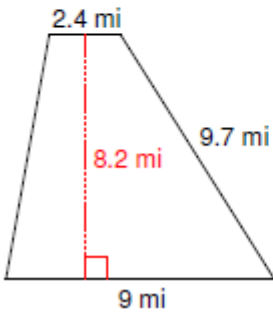
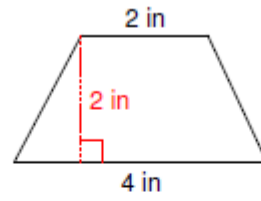
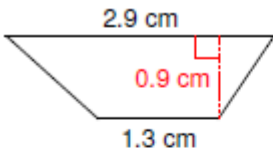
What is the formula for the Area of a Trapezoid ? Grade 7 only \_\_\_\_\_

What is the formula for the Area of a Triangle? Grade 6 only \_\_\_\_\_

Area of a Triangle Gr. 6 (Show all your work!)



Area of a Trapezoid Gr. 7 (Show all your work!)



**Define the following:**

Mean \_\_\_\_\_

Median \_\_\_\_\_

Mode \_\_\_\_\_

Fractions: Show all your work.

Anton read  $9\frac{1}{2}$  pages before supper. He read  $11\frac{3}{4}$  pages after supper. How many pages did he read altogether? (4 marks)

Add the following fraction:

$$1\frac{2}{3} + 1\frac{3}{5} =$$

Subtract the following fraction:

$$3 - 1\frac{1}{5} =$$

Multiply the following fraction:

$$\frac{8}{7} \times \frac{7}{24} =$$

Divide the following fraction:

$$\frac{3}{8} \text{ divided by } \frac{1}{4}$$