

Summer Math Review 2017
For All 6th Grade Sections

You should **not use a calculator** for this work.

1. Calculate the following:

i. $87 + 49 + 158$

ii. $82 - 57$

iii. $1004 - 287$

iv. $46 \cdot 78$

v. $324 \div 6$

vi. $416 \div 32$

2. For each of the following pairs of numbers, state the larger one:

i. 1001 111

ii. 3 -7

iii. 2.3 3.2

iv. 4.16 14.6

v. 2.30 2.03

vi. $\frac{41}{99}$ $\frac{53}{99}$

vii. $\frac{2}{3}$ $\frac{1}{6}$

viii. $\frac{1}{2}$ 0.6

3. Give two other fractions equivalent to $\frac{3}{9}$.

4. Simplify the following fractions as far as possible:

i. $\frac{2}{8}$

ii. $\frac{12}{24}$

iii. $\frac{12}{42}$

iv. $\frac{25}{105}$

5. Write the following improper fractions as mixed numbers:

i. $\frac{3}{2}$

ii. $\frac{7}{4}$

iii. $\frac{23}{10}$

iv. $\frac{80}{7}$

6. Is the sum of $\frac{1}{2}$ and $\frac{1}{3}$ more or less than 1? How do you know?

7. Write the following fractions as decimals:

i. $\frac{7}{10}$

ii. $\frac{2}{5}$

iii. $\frac{31}{50}$

iv. $\frac{7}{20}$

8. Calculate:

i. $10.1 + 1.2$

ii. $7.3 - 5.2$

iii. $1 - 0.43$

iv. $45.6 + 54.6$

9. Evaluate:

i. $\frac{5}{6} - \frac{1}{6}$

ii. $\frac{3}{11} + \frac{9}{11}$

iii. $2\frac{1}{2} - 1\frac{1}{2}$

iv. $2\frac{3}{5} + 1\frac{1}{5}$

10. Which of the following numbers are prime? List all that apply.

3	6	13	9	27
35	42	43	1	19
91	66	67	23	57

11. List all factors of the number:

i. 12

ii. 21

12. Find the prime factorization of:

i. 30

ii. 28

13. Which of the following numbers are multiples of 6? List all that apply.

2	6	13	9	24
33	42	45	3	18
90	66	62	26	57

14. When Gina went on vacation for two weeks, the daily high temperatures were as follows:

62	66	71	79	74	71	78
73	72	85	73	78	71	67

Find the median, mode and range of the temperatures on Gina's vacation.

15. Spot the pattern in the following input-output table and fill in the missing boxes:

x	1	2	3		8	10		25
y	1	3	5	13		19	29	

16. Find the next three terms in the following patterns:

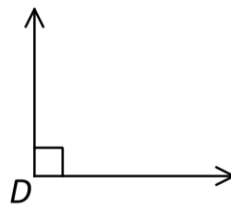
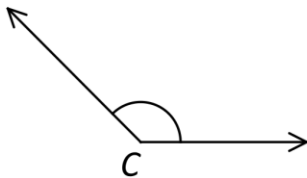
i. 5, 9, 13, 17, 21, ...

ii. 30, 25, 20, 15, 10, ...

17. What is the perimeter of a rectangle whose width is 5 cm and whose length is 8.4 cm?

18. A square has area 81 cm^2 . What is its perimeter?

19. Classify each of the following angles as either acute, obtuse, or right:



20. Use the following word bank to describe the polygons. Use as many words for each shape as appropriate:

rectangle

quadrilateral

pentagon

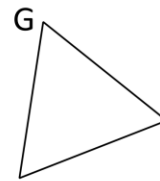
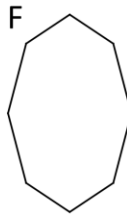
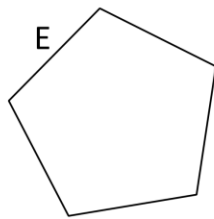
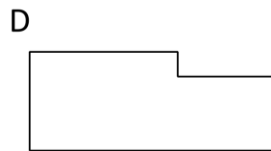
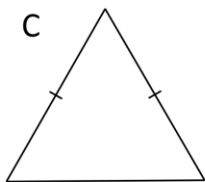
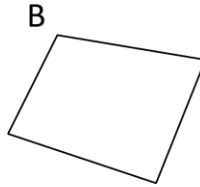
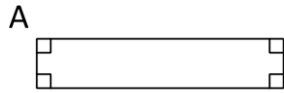
hexagon

triangle

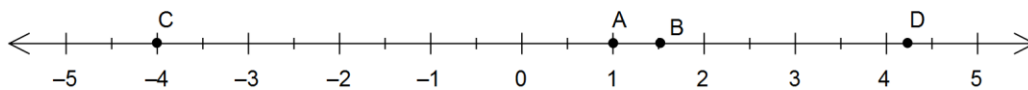
equilateral

isosceles

octagon

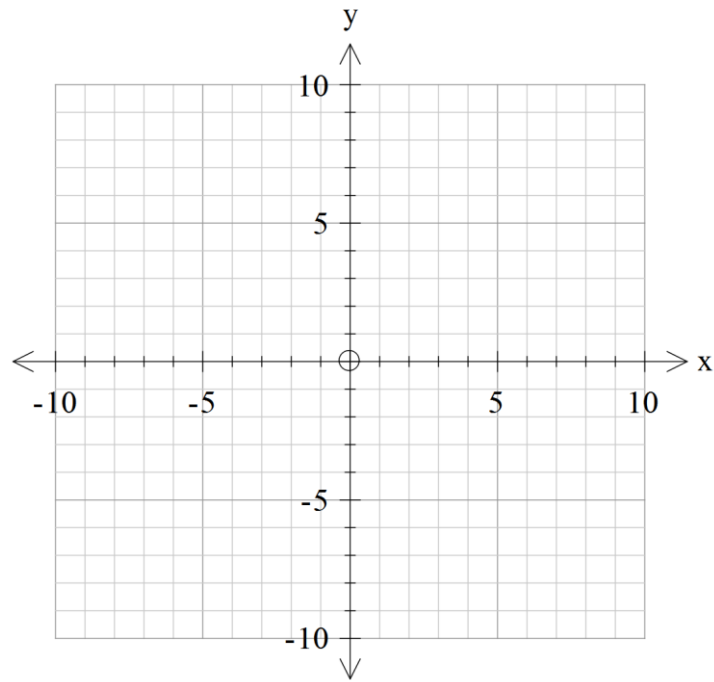


21. Consider the following number line.



- What numbers are represented by the points A, B, C and D?
- Plot -3.5 on the number line and call this point E.
- Plot 2.5 on the number line and call this point F.
- If you add the numbers represented by points E and F, will the answer be positive or negative? How do you know?

22. On the axes provided:



- a. Plot the point $(3, 7)$. Call it A.
- b. Plot the point $(-2, 5)$. Call it B.
- c. Plot the point $(8, -4)$. Call it C.