



The  
Calverton  
School

## 2026-2027 Summer Work

### PRE-ALGEBRA SUMMER PACKET

All work in this packet is to be completed without a calculator. I understand that you have access to one, and in many situations, it may make problems easier. However, these pages are designed to reinforce the core skills you will need for success in math this upcoming school year.

Relying on a calculator for this work will limit your practice with essential skills and may leave you underprepared for future topics. Please complete all problems using your mathematical reasoning and mental math skills.

If you have any questions, feel free to reach out to me via email at:

[jmooney@calvertonschool.org](mailto:jmooney@calvertonschool.org)

Enjoy your summer!

## SINGLE STEP EQUATIONS

1)  $x + 5 = 12$

2)  $x - 7 = 10$

3)  $3x = 21$

4)  $\frac{x}{4} = 6$

5)  $x + 9 = 15$

6)  $x - 3 = 8$

7)  $5x = 40$

8)  $\frac{x}{5} = 7$

9)  $x + 2 = 19$

10)  $x - 6 = 14$

$$11) 2x = 18$$

$$12) \frac{x}{3} = 9$$

$$13) x + 11 = 20$$

$$14) x - 8 = 5$$

$$15) 4x = 36$$

$$16) \frac{x}{2} = 11$$

$$17) x + 4 = 17$$

$$18) x - 9 = 6$$

$$19) 6x = 42$$

$$20) \frac{x}{7} = 5$$

## PERCENTS, DECIMALS, AND FRACTIONS

1) 25% as a decimal

2)  $\frac{3}{4}$  as a percent

3) 0.5 as a percent

4) 0.2 as a fraction

5) 50% as a decimal

6)  $\frac{3}{5}$  as a decimal

7) 0.8 as a percent

8) 25% as a fraction

9) 0.6 as a fraction

10) 90% as a decimal

11)  $\frac{2}{3}$  as a decimal

12) 0.1 as a percent

13)  $\frac{5}{8}$  as a decimal

14) 40% as a fraction

15) 0.9 as a fraction

16) 60% as a decimal

17)  $\frac{1}{2}$  as a percent

18) 0.3 as a fraction

19) 80% as a fraction

20) 0.7 as a percent

## STATISTICS

For each data set, find the mean, median, mode, range, MAD, and IQR

1) 2, 4, 6, 8

2) 10, 10, 5, 15

3) 3, 3, 6, 9, 12

4) 7, 14, 21, 28

5) 5, 5, 5, 10

6) 1, 2, 3, 4, 5

7) 8, 8, 9, 10

8) 12, 15, 18

9) 8, 8, 8, 8

10) 9, 11, 13, 15

11) 4, 6, 8, 10

12) 20, 25, 30, 35

13) 3, 7, 7, 9, 11

14) 2, 5, 8, 11, 14

15) 10, 10, 10, 12, 14

16) 1, 3, 5, 7, 9

17) 6, 12, 18, 24

18) 15, 15, 20, 25

19) 8, 10, 12, 14, 16

20) 5, 5, 6, 6, 7

## **DIVISION**

1)  $100 \div 8$  (decimal)

2)  $45 \div 6$  (remainder)

3)  $150 \div 4$  (mixed number)

4)  $54 \div 5$  (decimal)

5)  $32 \div 3$  (mixed number)

6)  $77 \div 6$  (remainder)

7)  $95 \div 8$  (decimal)

8)  $68 \div 9$  (mixed number)

9)  $123 \div 10$  (decimal)

10)  $47 \div 4$  (remainder)

11)  $88 \div 7$  (mixed number)

12)  $73 \div 6$  (decimal)

13)  $59 \div 8$  (remainder)

14)  $101 \div 4$  (mixed number)

15)  $62 \div 5$  (decimal)

16)  $83 \div 7$  (remainder)

17)  $94 \div 8$  (mixed number)

18)  $57 \div 4$  (decimal)

19)  $71 \div 9$  (remainder)

20)  $43 \div 5$  (mixed number)

## **RATIOS AND RATES**

- 1) Simplify the ratio 2:4.
  
- 2) Simplify the ratio 6:9.
  
- 3) Simplify the ratio 3:12.
  
- 4) Simplify the ratio 5:10.
  
- 5) Simplify the ratio 8:16.
  
- 6) Simplify the ratio 10:15.
  
- 7) Simplify the ratio 12:18.
  
- 8) Simplify the ratio 4:6.
  
- 9) Simplify the ratio 7:14.
  
- 10) Simplify the ratio 9:27.

11) Give the unit rate for 60 miles in 2 hours.

12) Give the unit rate for 120 miles in 3 hours.

13) Give the unit rate for 50 miles in 5 hours.

14) Give the unit rate for 200 miles in 4 hours.

15) Give the unit rate for 90 miles in 3 hours.

16) Give the unit rate for 36 apples for 6 people.

17) Give the unit rate for 100 dollars for 4 items.

18) Give the unit rate for 75 miles in 3 hours.

19) Give the unit rate for 48 cookies for 8 kids.

20) Give the unit rate for 150 miles in 5 hours.