

2018 Summer Learning Project

7th Grade Math

Dear PJHS Students and Parents,

In preparation for the 2018-2019 school year, each student entering 7th grade Math is required to complete a summer learning project. The project focuses on the prerequisite concepts and skills necessary for student success in 7th grade Math. The summer learning project is divided into 4 sections, each over different concepts. All 4 sections are attached to this letter and can also be found on the PJHS website. Each student will be responsible for turning in their assignment on the first day of their 7th grade school year.

- **Section 1: #'s 1- 9 → 9 problems**
- **Section 2: #'s 10-17 → 8 problems**
- **Section 3: #'s 18-24 → 7 problems**
- **Section 4: #'s 25-30 → 6 problems**

We wish you and your family a safe, happy, healthy and educational summer!

Thank you for your continued support,

The PJHS Math Department

SUMMER ASSIGNMENT

SECTION I-

Evaluate each expression.

1) $-2 \times 4(4 - 5 - 1)$

- A) 11 B) 20
C) 15 D) 16

2) $\frac{1}{7} + \frac{2}{3}$

- A) $\frac{157}{168}$ B) $8\frac{17}{21}$
C) $\frac{17}{21}$ D) $3\frac{17}{21}$

3) $2\frac{3}{4} - \frac{11}{7}$

- A) $3\frac{1}{84}$ B) $1\frac{17}{56}$
C) $1\frac{5}{28}$ D) $4\frac{13}{14}$

4) $1\frac{1}{3} \times \frac{8}{5}$

- A) $2\frac{14}{15}$ B) $2\frac{2}{15}$
C) $2\frac{31}{120}$ D) $2\frac{1}{3}$

5) $1 \div 4\frac{1}{2}$

- A) $5\frac{1}{2}$ B) $4\frac{1}{2}$
C) $1\frac{7}{10}$ D) $\frac{2}{9}$

Solve each equation.

6) $a - 5 = -20$

- A) $\{-15\}$ B) $\{-4\}$
C) $\{-100\}$ D) $\{-25\}$

7) $x - (-13) = 20$

- A) $\{7\}$ B) $\{-260\}$
C) $\{-1\frac{7}{13}\}$ D) $\{33\}$

Solve each proportion.

8) $\frac{6}{3} = \frac{x}{6}$

- A) $\{3.5\}$ B) $\{6.3\}$
C) $\{6\}$ D) $\{12\}$

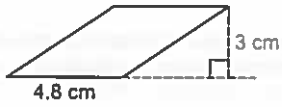
9) $\frac{7}{5} = \frac{6}{n}$

- A) $\{1.3\}$ B) $\{2.3\}$
C) $\{7.4\}$ D) $\{4.29\}$

SECTION II

Find the area of each.

10)



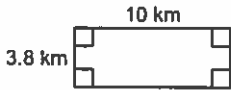
- A) 10 cm^2 B) 7.2 cm^2
 C) 14.4 cm^2 D) 28.8 cm^2

11)



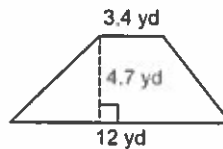
- A) 8.2 in^2 B) 16.4 in^2
 C) 2.1 in^2 D) 4.1 in^2

12)



- A) 76 km^2 B) 19 km^2
 C) 38 km^2 D) 33.3 km^2

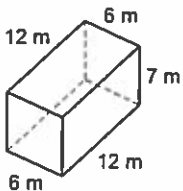
13)



- A) 36.19 yd^2 B) 18.1 yd^2
 C) 39.99 yd^2 D) 72.38 yd^2

Find the volume. Round to the nearest tenth.

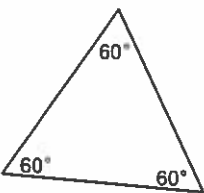
14)



- A) 201.6 m^3 B) 504 m^3
 C) 252 m^3 D) 403.2 m^3

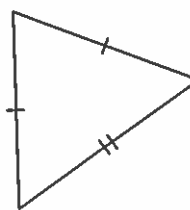
Classify each triangle by its angles and sides.

15)



- A) right scalene
 B) acute scalene
 C) acute isosceles
 D) equilateral

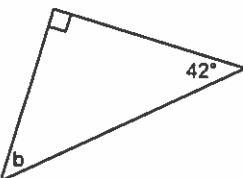
16)



- A) obtuse scalene
 B) right scalene
 C) acute isosceles
 D) right isosceles

Find the measure of angle b.

17)



- A) 48° B) 57°
 C) 74° D) 66°

SECTION III

Write as a fraction.

18) 5%

- A) 5 B) 120
C) 20 D) $\frac{1}{20}$

Write each as a decimal. Round to the thousandths place.

19) 10%

- A) 0.4 B) 10
C) 110 D) 0.1

20) 61.7%

- A) 61.7 B) 6.17
C) 1234.2 D) 0.617

Write as a percent. Round to the nearest tenth of a percent.

21) $\frac{3}{25}$

- A) 3.3% B) 833.3%
C) 12% D) 0.1%

Solve each problem.

22) What percent of 74 is 114?

- A) 64.9% B) 154.1%
C) 1.54% D) 0.65%

23) 90% of 2.6 is what?

- A) 234 B) 2.3
C) 2.9 D) 52470

24) 25 is 34% of what?

- A) 68.4 B) 8.5
C) 850 D) 73.5

SECTION IV

- 25) A recipe for a cake calls for $3\frac{1}{3}$ cups of water. Molly accidentally put in $5\frac{5}{9}$ cups. How many extra cups did she put in?
- A) $8\frac{8}{9}$ B) $2\frac{2}{9}$
C) $5\frac{5}{9}$ D) $\frac{3}{5}$
- 26) Your grandfather gave you \$3.06 with which to buy a present. This covered $\frac{2}{3}$ of the cost. How much did the present cost?
- A) \$4.24 B) \$4.87
C) \$4.59 D) \$3.73
- 27) Jasmine paid \$2 for a salad. She now has \$18. With how much money did she start?
- A) \$22 B) \$23
C) \$20 D) \$16
- 28) Ashley spent \$15 on three fancy pens. How much did each pen cost?
- A) \$3 B) \$6
C) \$45 D) \$5
- 29) Last Friday Stephanie had \$5.32. Over the weekend she received some money for washing the dog. She now has \$22.89. How much money did she receive?
- A) \$17.57 B) \$40.46
C) \$12.25 D) \$0.30
- 30) How many boxes of envelopes can you buy with \$14.64 if one box costs \$4.88?
- A) 3 B) 4 C) 5 D) 2