

Academir Middle School 6th Grade Summer Mathematics Packets

Students Should print out their packets, work on them during the summer, and be prepared to turn them in on August 22nd, 2016. Please ensure that "you show all your work".

Name: _____ Date: _____

6th Grade-Mathematics-Summer Packets 2016

Question 1 of 34

Which task must be completed first when solving the following equation?

$$(5 + 8) + 12.2 \div 2 = \square$$

- A. add
- B. divide
- C. multiply
- D. subtract

Question 2 of 34

Which equation is an example for the following rule?

No matter how you group a series of numbers, they always add up to the same sum.

- A. $(3+1)+7 = 3+(1+7)$
- B. $(3 \times 4) \times 3$
- C. $5 \times 2 = 2 \times 5$
- D. $3 + 6 = 9$

Question 3 of 34

What will be the next product in this series?

$$10 \times 54 = 540$$

$$100 \times 54 = 5,400$$

$$1,000 \times 54 = \underline{\hspace{2cm}}$$

- A. 5,000
- B. 54,000
- C. 500,000
- D. 540,000

Question 4 of 34

Find the missing product.

$$81 \times 3 = 243$$

$$81 \times 30 = 2,430$$

$$81 \times 300 = 24,300$$

$$81 \times 3,000 = \underline{\hspace{2cm}}$$

- A. 24,300
- B. 243,000
- C. 2,430
- D. 3,081

Question 5 of 34

How should this number be multiplied when using the powers of ten?

$$3,475 \times 6$$

- A. $6(3 \times 10^3) + 6(4 \times 10^2) + 6(7 \times 10^1) + (6 \times 5)$
- B. $(6 + 5) \times 1 + (6 + 7) \times 10^1 + (6 + 4) \times 10^2 + (6 + 3) \times 10^3$
- C. $6 + (3 \times 10^3) - 6 + (4 \times 10^2) - 6 + (7 \times 10^1) - (6 \times 5)$
- D. $6(3 + 10^3) + 6(4 + 10^2) + 6(7 + 10^1) + (6 + 5)$

Question 6 of 34

Which comparison is true?

- A. $2.4 = 2.04$
- B. $24.0 = 2.40$
- C. $2.4 = 2.040$
- D. $2.4 = 2.40$

Question 7 of 34

A round-trip plane ticket from New York to Chicago costs \$400.

How much would the trip cost for 3 people?

- A. \$700
- B. \$800
- C. \$1,000
- D. \$1,200

Question 8 of 34

Solve.

$$\$185 \times 31 = \underline{\hspace{2cm}}$$

- A. \$5845
- B. \$5735
- C. \$3147
- D. \$154

Question 9 of 34

$$800 \times 70 = \underline{\hspace{2cm}}$$

- A. 56,000
- B. 63,000
- C. 80,070
- D. 80,700

Question 10 of 34

$$1,358 \times 46 = ?$$

- A. 13,580
- B. 52,468
- C. 62,368
- D. 62,468

Question 11 of 34

There are 24 pages in an album and 120 photos. The photos are divided equally among the pages.

How many photos are on each page of the album?

- A. 5 photos
- B. 96 photos
- C. 144 photos
- D. 2,880 photos

Question 12 of 34

There are 100 students that must be equally separated into 4 classrooms.

Which equation shows how to find the number of students assigned to each room?

- A. $100 \times 4 = s$
- B. $100 \div 4 = s$
- C. $4 \times 100 = s$
- D. $4 \div 100 = s$

Question 13 of 34

Find the quotient.

$$2,200 \div 10 = \underline{\hspace{2cm}}$$

- A. 220
- B. 200
- C. 2,200
- D. 22

Question 14 of 34

The table shows how many hours truck drivers drove in one day. Pretend you are making a pictograph with symbols of steering wheels to equal 2 hours. (one wheel=2 hours)

Truck	Hours
1	7
2	12
3	18
4	9

How many symbols would you use to show the amount of time spent driving by truck 3?

- A. 24
- B. 12
- C. 18
- D. 9

Question 15 of 34

Solve: $3\frac{1}{5} + 8\frac{2}{3}$

- A. $11\frac{2}{15}$
- B. $11\frac{3}{8}$
- C. $11\frac{5}{9}$
- D. $11\frac{13}{15}$

Question 16 of 34

Find the sum in simplest form.

$\frac{2}{10} + 1\frac{4}{10} =$

- A. $1\frac{3}{10}$
- B. $1\frac{3}{5}$
- C. $1\frac{6}{20}$
- D. $1\frac{6}{10}$

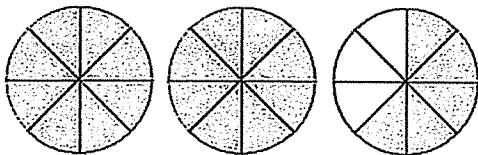
Question 17 of 34

Add.

$\frac{3}{4} + \frac{1}{6} =$ _____

- A. $\frac{3}{12}$
- B. $\frac{4}{10}$
- C. $\frac{11}{12}$
- D. $\frac{6}{6}$

Question 18 of 34



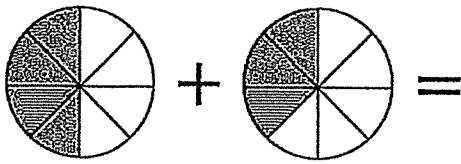
Sally baked 3 pies for a luncheon. She cut each pie into 8 slices. After the luncheon, there were only 3 slices left.

What fraction represents the amount of pie that was eaten?

- A. $2\frac{3}{8}$
- B. $2\frac{5}{8}$
- C. $3\frac{3}{8}$
- D. $3\frac{5}{8}$

Question 19 of 34

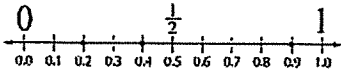
Find the sum of the shaded pieces.



- A. $\frac{1}{8}$
 B. $\frac{3}{8}$
 C. $\frac{7}{8}$
 D. $\frac{6}{8}$

Question 20 of 34

Luis walks 0.4 mile to school, 0.9 mile to the grocery, and 0.2 mile to the baseball field. Use the number line to estimate how many miles Luis walks in all.



- A. 2 miles
 B. 1 mile
 C. $\frac{1}{2}$ mile
 D. $1\frac{1}{2}$ miles

Question 21 of 34

Noel ate $\frac{2}{5}$ of a pizza. Bonnie ate $\frac{3}{7}$ of the pizza.

How much pizza did they eat all together?

- A. $\frac{3}{4}$
 B. $\frac{11}{12}$
 C. $\frac{29}{35}$
 D. $\frac{35}{29}$

Question 22 of 34

Convert $\frac{5}{3}$ to a mixed number.

- A. $1\frac{2}{3}$
 B. $3\frac{1}{5}$
 C. $3\frac{2}{3}$
 D. $5\frac{1}{3}$

Question 23 of 34

Rewrite the improper fraction as a mixed number in lowest terms.

$$\frac{51}{6}$$

- A. $8\frac{1}{3}$
- B. $8\frac{1}{2}$
- C. $8\frac{3}{6}$
- D. $8\frac{2}{3}$

Question 24 of 34

A group of 84 students went to the park. Half of the students played ball. One fourth of the students fished. The remaining students hiked the trails.

How many students went hiking?

- A. 10 students
- B. 21 students
- C. 42 students
- D. 84 students

Question 25 of 34

What is the product?

$$\frac{4}{9} \times 9 = \underline{\hspace{2cm}}$$

- A. $\frac{4}{81}$
- B. 4
- C. 5
- D. 36

Question 26 of 34

A Tyrannosaurus could eat one-third of his weight in meat every week. If he weighs 12,000 pounds, how much would he eat in one week?

- A. 100 pounds
- B. 4,000 pounds
- C. 5 pounds
- D. 50 pounds

Question 27 of 34

What must $\frac{4}{5}$ be multiplied by to get a number greater than $\frac{4}{5}$?

- A. $\frac{1}{4}$
- B. $\frac{2}{5}$
- C. $\frac{3}{4}$
- D. $\frac{5}{4}$

Question 28 of 34

Which product is greater than 5?

- A. $5 \times \frac{2}{2}$
- B. $5 \times \frac{3}{4}$
- C. $5 \times \frac{4}{5}$
- D. $5 \times \frac{5}{4}$

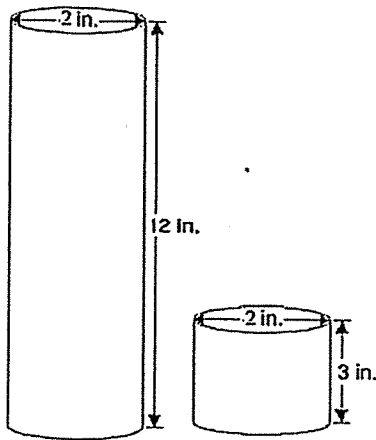
Question 29 of 34

Which of the following products is NOT equal to $\frac{1}{2}$?

- A. $\frac{1}{2} \times \frac{2}{2}$
- B. $\frac{2}{4} \times \frac{4}{4}$
- C. $\frac{3}{6} \times \frac{3}{6}$
- D. $\frac{3}{3} \times \frac{1}{2}$

Question 30 of 34

The larger cylinder has an approximate volume of 150 cubic inches.

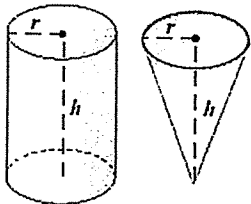
What is the best approximation for the volume of the smaller cylinder?

- A. 85 cubic inches
- B. 50 cubic inches
- C. 35 cubic inches
- D. 20 cubic inches

Question 31 of 34

The volume of a cylinder is three times that of a cone, if the radius and height are the same. The volume of the cone is 90 cubic liters.

what is the volume of the cylinder?

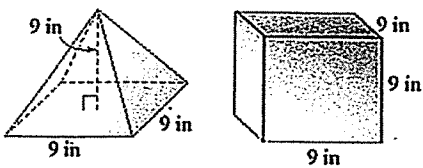


- A. 30 cubic liters
- B. 270 cubic liters
- C. 300 cubic liters
- D. 390 cubic liters

Question 32 of 34

The volume of the square prism is 729 cubic inches.

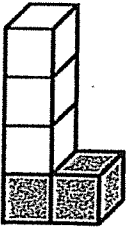
What is the volume of the square pyramid, if the formula for a square pyramid is one-third that of a square prism?



- A. 333 cubic inches
- B. 243 cubic inches
- C. 81 cubic inches
- D. 27 cubic inches

Question 33 of 34

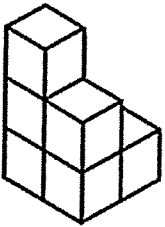
What is the volume of the entire figure shown?



- A. 3 cubic units
- B. 4 cubic units
- C. 5 cubic units
- D. 6 cubic units

Question 34 of 34

What is the volume of the figure shown?



- A. 4 cubic units
- B. 5 cubic units
- C. 6 cubic units
- D. 7 cubic units

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