

King School

Math Review Summer Assignment

For Students Entering 6th Grade (all levels)

2021-2022

-All work should be done directly on this packet. If you need more space to show your work, please use a separate sheet of paper carefully labeling the page and problem number and doing the problems needed in order. Then attach the extra paper to the back of this packet.

-Every answer should be **circled**.

-All necessary work should be shown to support your answers when applicable. No answers only will be accepted. No calculators allowed.

-Please be sure to use notes from the previous year as well as educational resources on the Internet such as Kahn Academy to refresh your memory if need be.

-Working with a tutor on these exact problems is not permitted.

-This assignment will be handed in the first day of class and will count towards your first graded assignment.

-Note: there may be some problems that contain content that you have never seen before based on your previous math class. If that is the case, do your best to try and make a note as needed. This may be particularly true at the end of the packet. For example, you may not have been taught percent before. If that is the case, do not worry, try anyway and make a note.

Good luck and have fun exercising your math brain! ☺

I can't wait to meet you and learn together! Sincerely, Ms. Couch

1.

Complete the table by rounding each number to the nearest thousand, hundred and ten.

	Rounded to nearest		
	Thousand	Hundred	Ten
16,234			
105,062			
90,992			
256,995			

2.

Arrange these numbers in increasing order.

$\frac{9}{3}$	$\frac{3}{8}$	$\frac{14}{5}$	$\frac{2}{3}$
---------------	---------------	----------------	---------------

3.

Complete the following number patterns.

(a) 46,770, 47,770, _____, 49,770

(b) 68,282, _____, _____, 71,282, 72,282

4.

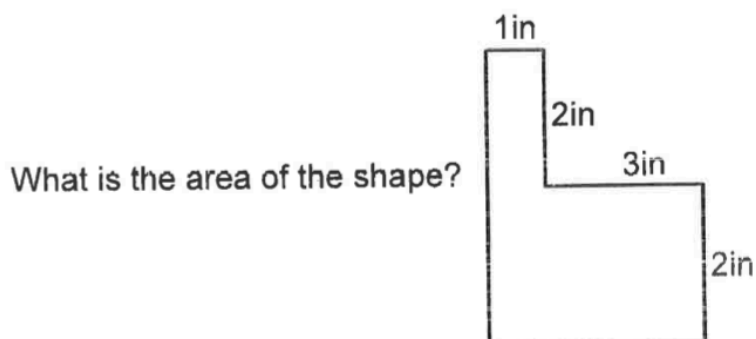
Fill in the missing numerator or denominator.

$$\frac{2}{3} = \frac{8}{\quad} \quad \frac{56}{64} = \frac{\quad}{8} \quad \frac{45}{81} = \frac{35}{\quad}$$

5.

The shape was created by joining two rectangles.

What is the perimeter of the shape?



6.

A machine produces 18 toys in one minute. How many such toys does it produce in one hour?

7.

$$\begin{array}{r} 763 \\ \times 28 \\ \hline \end{array}$$

$$\begin{array}{r} 879 \\ \times 76 \\ \hline \end{array}$$

$$\begin{array}{r} 637 \\ \times 68 \\ \hline \end{array}$$

8.

In 382,746, the value of the digit 8 is _____.

9.

Anna had 36 crayons. She gave $\frac{1}{4}$ of them to her brother. She then gave $\frac{1}{3}$ of the remainder to her sister. How many crayons did Anna have left?

10.

Complete the following regular number patterns.

8, 7, _____, 5, 4, 3, _____, 1,
_____, -1, _____, -3

2.5, 2.6, 2.7, 2.8, 2.9, _____

11.

Fill in the blanks.

(a) $5,600 \div 8 =$ _____

(b) $5,600 \div 80 =$ _____

(c) $5,600 \div 800 =$ _____

12.

Sean and Patrick worked 76 hours altogether in one week. Patrick worked 8 hours more than Sean. How many hours did Sean work?

13.

Round each of the following to 2 decimal places.

(a) 8.607 _____ (b) 7.342 _____

14.

Find the value of each expression.

(a) $42 \div 6 + 32 \times 6 =$ _____

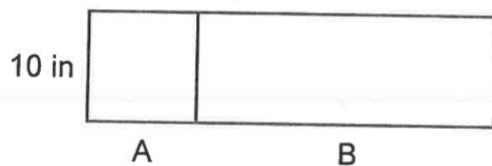
(b) $4 + 8 \div 2 - 3 =$ _____

15.

(a) $580 \div 29 =$ _____

(b) $832 \div 26 =$ _____

16.



The figure above, not drawn to scale, is of two rectangles. Rectangle A is $\frac{1}{3}$ as long as rectangle B. What is the area of rectangle A if the rectangle of the whole figure is 360 sq. in.?

17.

Fill in the blanks.

A(n) _____ triangle has no equal sides.

A(n) _____ triangle has two equal sides.

A(n) _____ triangle has three equal sides.

17.

True or false?

(a) A square is always a rectangle _____

(b) A rectangle is always a square _____

(c) A square is always a rhombus _____

(d) A rhombus is always a square _____

18.

Fill in the blanks.

(a) _____ is 100,000 less than 3,259,087.

(b) 100 more than 47,908 is _____.

19.

Fill in the missing numerators or denominators.

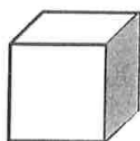
$$\frac{3}{7} = \frac{\quad}{42} \qquad \frac{14}{35} = \frac{8}{\quad} \qquad \frac{34}{51} = \frac{\quad}{9}$$

20.

Mr. Lim walks 5 miles in 1 hour 20 minutes.
How long does it take Mr. Lim to walk one mile?

21.

The volume of this cube is 64 cubic cm. Find
the length of each edge of the cube.



22.

The total length of two pieces of wire is $4\frac{1}{10}$ ft.

If one piece of wire is $2\frac{4}{5}$ ft. long, how long is the other piece of wire?

23.

Find the value of the following expressions.

(a) $14 + 8 \div 2 \times 7$ _____

(b) $32 - 16 \times 2 \div 4 - 5$ _____

24.

Express each decimal as a fraction or a mixed number in simplest form.

(a) 0.8 _____ (b) 0.65 _____

(c) 2.708 _____ (d) 3.052 _____

25.

A chef bought a 5 lb bag of sugar. He used $\frac{3}{4}$ of it for a recipe. How much flour did he use? Express your answer in pounds.

26.

Harold and Reese mowed lawns to earn money. Harold worked twice as long as Reese. When the boys were paid, Harold got twice as much as Reese. If the total amount the boys were paid was \$14.25, how much money did Reese get?

27.

Name four different types of quadrilaterals.

1. _____

2. _____

3. _____

4. _____

28.

Find the value of each expression.

(a) 0.25×12 _____

(b) 0.225×24 _____

(c) 7.48×36 _____

29.

A shopkeeper had 400 cards to sell. He sold $\frac{1}{5}$ of them on Monday, $\frac{1}{5}$ of them on Tuesday, and $\frac{5}{6}$ of the remainder on Wednesday. How many cards did he have left?

30.

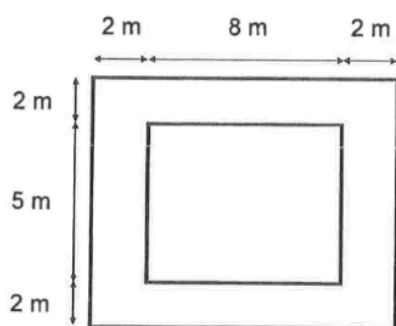
Find the value of each expression. Express your answer in simplest terms.

(a) $\frac{1}{3} + \frac{1}{6} + \frac{1}{9}$ _____

(b) $\frac{3}{4} + \frac{5}{8} + \frac{1}{3}$ _____

31.

The figure shows a rectangular garden surrounded by a path 2 m wide around it. Find the area of the path.



32.

A tailor had a piece of cloth measuring $12\frac{2}{3}$ m. He used $6\frac{1}{8}$ m of it. What length of the cloth was left?

Find the value of each expression.

$$3\frac{2}{3} - 1\frac{7}{8} \quad \underline{\hspace{2cm}}$$

$$4\frac{1}{8} - 2\frac{4}{5} \quad \underline{\hspace{2cm}}$$

List all of the factors of each of the following numbers.

(a) 18 _____

(b) 42 _____

(c) 64 _____

(d) 65 _____

Amina had \$300. She spent $\frac{1}{3}$ of it. She then gave $\frac{1}{4}$ of the remainder to her brother. How much money did Amina have left?

A rectangular field measures 50 yd by 30 yd. Luis ran around the field $2\frac{1}{2}$ times. How many yards did Luis run altogether?

37.

Find the missing numbers.

(a) _____ + 3,456 = 7,000

(b) _____ - 2,308 = 4,692

(c) _____ \times 14 = 5,600

38.

A rectangular prism is 6 cm long, 2 cm wide and 10 cm high. What is the volume of the prism?

39.

List three common factors of 48 and 96 other than 1.

40.

Express each of the following improper fractions as a whole number or a mixed number in simplest form.

(a) $\frac{18}{3} =$ _____ (b) $\frac{58}{8} =$ _____

41.

Jennifer spent $\frac{3}{7}$ of her savings on a camera. If the camera cost \$42, how much did Jennifer have in savings before she bought the camera?

42.

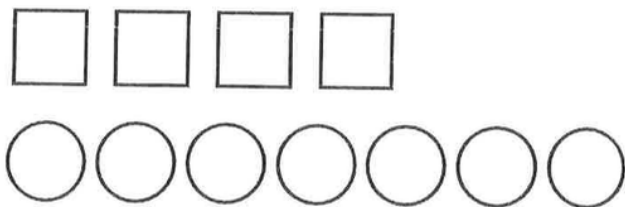
Are these lines parallel or perpendicular?



43.

Mishan needed a total of 3.06 m of string to tie three identical boxes closed. What length of string did Mishan need for each box? Express your answer in meters.

44.



The ratio of the number of circles to the number of squares is _____.

45.

A baker divided $\frac{7}{8}$ kg of flour equally into seven bags. How much flour was in each bag? Express your answer in kg.

46.

List the first three common multiples of 5 and 10.

47.

Express all of your answers in simplest terms.

(a) $\frac{1}{4} \times \frac{1}{3} =$ _____

(b) $\frac{3}{5} \times \frac{5}{9} =$ _____

(c) $\frac{2}{7} \times \frac{9}{10} =$ _____

(d) $\frac{4}{9} \times \frac{3}{8} =$ _____

48.

The product of 2 numbers is 156. If one of the numbers is 13, find the sum of the two numbers.

49.

Express your answer in simplest terms.

(a) $\frac{1}{2} \div 4 =$ _____ (b) $\frac{5}{6} \div 9 =$ _____

50.

Mrs. Lim had \$40. She spent \$10.50 and divided the remainder between her two children in equal shares. How much money did each child receive?

51.

Fill in the blanks.

(a) $\frac{2}{7}$ of 63 = _____ (b) $\frac{3}{8}$ of 64 = _____

(c) $\frac{4}{9}$ of 36 = _____ (c) $\frac{3}{7}$ of 56 = _____

52.

Find the value of each expression.

(a) $612 \div 2 \times 3 + (14 - 9) + 3$ _____

(b) $101 - 9 \times 3 - 2$ _____

53.

Add parentheses to the following equations to make each of them true.

(a) $14 + 8 \div 2 \times 3 - 1 = 32$

(b) $6 \times 4 + 2 - 5 = 31$

54.

Nicole's book has 6 times as many pages as Veronica's book. If Veronica's book has 48 pages, how many pages do the two books have altogether?

55.

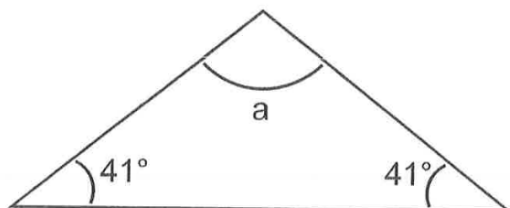
Find the average of each of the following:

(a) 6, 9, 15

(b) \$6.85, \$4.25, \$6.15, \$7.75

56.

Find the measure of angle a .



57.

Fill in the blanks.

- (a) A right angle measures _____°.
- (b) A straight line measures _____°.
- (c) A(n) _____ angle is smaller than a right angle.
- (d) A(n) _____ angle is larger than a right angle.
- (e) A(n) _____ triangle has no equal sides.
- (f) A(n) _____ triangle has two equal sides.
- (g) A(n) _____ triangle has three equal sides.

58.

Juan started walking to school at 7:45 a.m. He arrived at school at 8:10 a.m. How long did it take Juan to walk to school?

59.

Express the following in centimeters.

- (a) 0.68 m = _____ cm.
- (b) 3.04 m = _____ cm.
- (c) 0.03 m = _____ cm.
- (d) 15.2 m = _____ cm.

60.

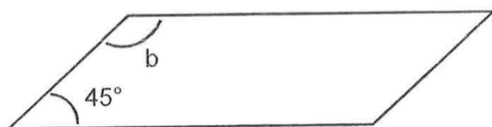
In a club there are 36 boys and 14 girls. What percentage of the children are boys?

61.

A train left the train station in Town A at 6:25 p.m. on Tuesday. It arrived at the train station in Town B at 8:05 a.m. on Thursday. How long did it take the train to travel from Town A to Town B?

62.

Find the angle b of this parallelogram.

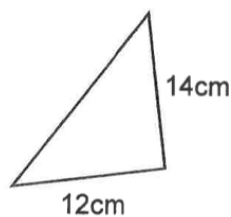


63.

A printer prints 48 pages in 3 minutes. At this rate, how many pages will it print in 14 minutes?

64.

Find the area of this right triangle.



65.

In a factory, the ratio of men to women workers is 4 : 7. If there are 56 women working in the factory how many people work in the factory altogether?

66. (note: percent means out of 100. Therefore $50\% = 50/100 = \frac{1}{2}$)

Express each of the following percentages as a fraction in simplest form.

(a) $50\% =$ _____ (b) $48\% =$ _____

(c) $99\% =$ _____ (d) $32\% =$ _____

(e) $5\% =$ _____ (f) $75.5\% =$ _____

67.

Express each decimal as a percentage.

(a) 0.1 _____ (b) 0.06 _____

(b) 0.68 _____ (d) 0.2 _____

68.

Express each fraction as a percentage.

(a) $\frac{1}{2}$ _____ (b) $\frac{3}{4}$ _____ (c) $\frac{9}{20}$ _____

69.

Jose and Maria have 360 stamps altogether.
If Maria has 25% more stamps than Jose, how many stamps does Maria have?

70.

A math teacher was preparing report cards for her class by averaging the scores on tests and assignments for each student. One student had the following scores: 90%, 85%, 100%, 75%, 95%, 80%, 65%, and 90%. What was the average of this student's scores?