

B. F. Butler Middle School
7th Grade Summer Math
Packet

Dear Incoming 7th Graders,

Please complete this summer math packet prior to the beginning of the 2018-2019 school year. The purpose of the math packet is to keep all of the skills you learned in 6th grade fresh in your mind, so we can begin teaching 7th grade skills when you return. The packet will count as a quiz grade and you must show your work on every question to receive full credit. Please use pencil and write neatly. Don't wait until the end of summer to begin your packet!

If you need help answering any of these questions please feel free to watch videos on Khan Academy.

We are very excited to have you in our class next school year. Have a relaxing and exciting summer break!

Sincerely,

Ms. Kabriel and Ms. Fang

Summer Math

name: _____

Solve the problems below. Be sure to show your thinking.

1. A florist uses 200 lilies to make 8 identical flower arrangements. How many lilies would the florist use to create 6 identical arrangements?

- A. 25
- B. 150
- C. 225
- D. 175

$$\frac{\text{lilies}}{\text{arrangements}} = \frac{\text{---}}{\text{---}} = \frac{\text{---}}{\text{---}}$$

2. There are 14 girls and 12 boys in a class. What is the ratio of girls to students?

- A. 14:6
- B. 6:7
- C. 13:7
- D. 7:13

$$\frac{\text{girls}}{\text{boys}} = \frac{\text{---}}{\text{---}}$$

$$\frac{\text{---}}{\text{total students}}$$

3. A random survey of the quality of city parks is taken. Sixty-five percent of the people surveyed were pleased with the condition of the parks. If 182 people were pleased, how many were surveyed?

- A. 117
- B. 118
- C. 280
- D. 462

$$65\% \text{ of } \boxed{?} = 182$$

4. A tube of toothpaste is marked \$3.92 for 8 ounces. What is the price per ounce?

- A. \$2.04
- B. \$0.25
- C. \$0.49
- D. \$0.65

$$\frac{\$}{\text{oz}} = \frac{\text{---}}{\text{---}} = \frac{?}{1 \text{ oz}}$$

5. Which product is the better deal?



60 oz for \$7.20



75 oz for \$8.25

- A. Washing Powder
- B. Super Clean

6. Mr. Bishop's garden measures 10 meters by 5 meters. He would like to enclose it with fencing. How many centimeters of fencing will Mr. Bishop need?

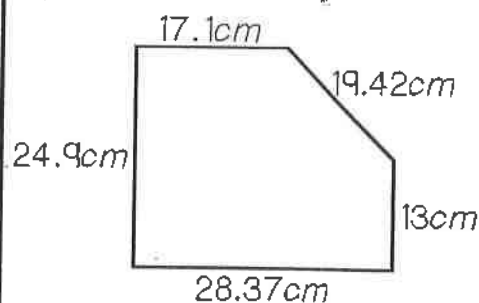
- A. 1500
- B. 300
- C. 150
- D. 3000

$$1 \text{ meter} = 100 \text{ centimeters}$$

7. Maggie is participating in her school reading challenge. She reads 40 books in 6 months. If 26 of the books are fiction, what percent of the books that she read are non-fiction?

- A. 23%
- B. 6%
- C. 65%
- D. 35%

8. Find the perimeter of the figure below.



9. The average shoulder height of the Grizzly Bear is 3.35 feet. The average shoulder height of the Polar Bear is 4.4 feet. How much taller is the Polar Bear than the Grizzly Bear?

10. Granny Smith is making strawberry jelly. She fills 6.5 ounce jars to give as gifts. Granny was able to fill 9.5 jars. How many ounces of strawberry jelly did Granny Smith make?

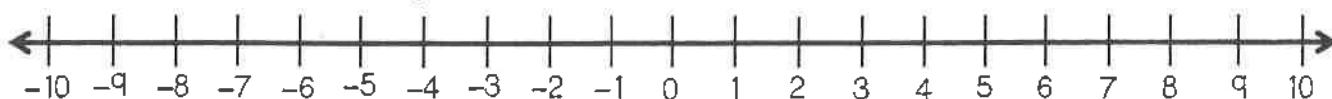
11. At Yogurt Express they charge \$0.17 per ounce of yogurt and toppings. Maria pays \$2.04 for her yogurt. How many ounces of yogurt and toppings did Maria get?

Write an inequality to match the statement below.

12. -7 is located to the right of -9 *example: $-9 < -7$*
13. 14 is greater than 10
14. -6 is less than -5.5
15. -4.5 is located to the left of -1.5
16. the opposite of 7 is greater than -10

17. Order the following numbers on the number line below.

$$-9.5, \frac{1}{4}, 4\frac{2}{3}, -7.1, -\frac{8}{5}$$



18. Find the length of the rectangle below:

$$\frac{4}{5}m$$

$$A = 1\frac{2}{5}m^2$$

$$A = L \times W$$

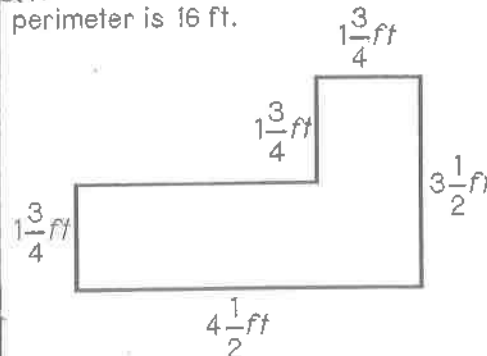
$$1\frac{2}{5} = L \times \frac{4}{5}$$

$$L =$$

19. Chelsea is sewing handmade scarves for her sisters and friends. She has $7\frac{1}{2}$ yards of material and needs $2\frac{1}{4}$ yards of material for each scarf. How many scarves can she make with the existing material?

20. A neighborhood trash pick up comes every 5 days, while the recycling pick up is every 8 days. After how many days will both the trash and recycling be picked up on the same day?

21. Find the missing side lengths below, when the perimeter is 16 ft.



22. Write the following expanded form in exponent form.

$$9 \cdot 6 \cdot 6 \cdot 9 \cdot 6 \cdot 6$$

23. Simplify: $3(3a + 4b)$.

24. Translate the following expression into an algebraic expression.

Three times the sum of a number and seven, all divided by four.

25. Joey sells three times as many calendars as Mason. Write an expression to describe how many calendars Joey sold. If Joey sold 18 calendars, how many did Mason sell?

26. Evaluate if $x=7$ and $y=3$.

$$\frac{2x^2 - 6 \cdot 3}{5}$$

27. Which of the following make the equation true?

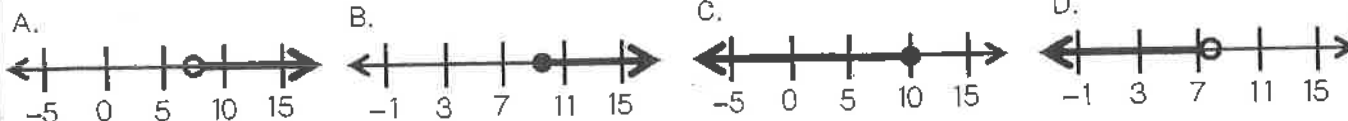
$$\frac{1}{4}b = 16$$

- A. 64
- B. 4
- C. 16
- D. 8

Match the inequalities to the correct graph.

28. $7.5 < x$

29. $x \leq 10$



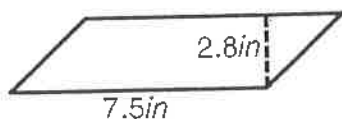
30. Solve for d.

$$\frac{d}{7} = 13$$

31. Solve for j.

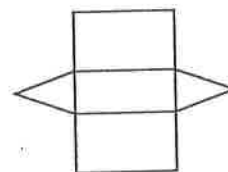
$$j - 18 = 43$$

32. What is the area of the figure below?

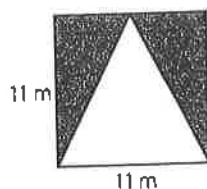


33. Which 3D object does the net form?

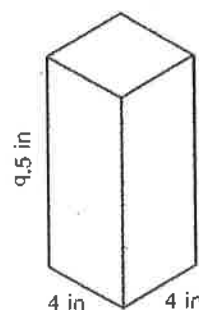
- A. Triangular prism
- B. Rectangular prism
- C. Triangular pyramid
- D. None of these



34. Find the area of the shaded region.



35. What is the volume of the rectangular prism below?



36. Find the surface area of the rectangular prism below.

