**Instructions : Choose the letter of the correct answer. In all cases, E) NOTA means “none of these answers”.**

**Fractions and Decimals**

1. Perry the Platypus has forgotten the password to get to his secret agent headquarters. To reset the password he must solve an equation. Help Perry and evaluate

**A) 1 B) 2 C) 4 D) 8 E) NOTA**

2. Phineas and Ferb’s mom is going to bake cookies. However, before she can start, she has to simplify the fractions on the recipe. Which of these answers is equivalent to ?

**A) B) C) D) E) NOTA**

3. Phineas has decided to take matters in to his own hands and travel back in time to find his favorite piece of ice. It takes him five ten-thousandths of a minute to figure out which time period the ice piece was transported to. What is the decimal “five ten-thousandths” in numeral form?

**A) 0.05 B) 0.005 C) 0.0005 D) 0.00005 E) NOTA**

4. Ferb loves to ride his sister’s bike, but he wants to buy his own. In his piggy bank, he has $126.20. The price of the 10-speed bike he wants is $144.99. How much more does he need to buy this bike?

**A) $10.00 B) $14.50 C) $17.79 D) $20.99 E) NOTA**

5. Phineas and Ferb want to make a robot, but they can’t decide how tall to build it. Phineas thinks it should be 6.25 feet tall. Ferb wants it to be 60.5 inches tall. They agree to make the robot the average of the two heights they want. How tall will they build their robot in inches?

**A) 67.75 B) 70 C) 75.5 D) 76.25 E) NOTA**

6. But you can’t make a robot without measuring your supplies first! Ferb measures out three pieces of wood. They are , 5.5, and inches long. In total, how many inches of wood does he have?

**A) 8 B) C) D) E) NOTA**

**Number Fun**

7. Candace LOVES patterns. Her bedspread, pillow, and rug are all adorned with patterns. What is the next number in the pattern: 2, 4, 8, 14, 22, 32…

**A) 42 B) 44 C) 64 D) 96 E) NOTA**

8. Candace has an obsession with the number 39. Her obsession is so great that she has 39 shirts, 39 skirts, 39 pairs of shoes, 39 posters of One Direction, and 39 pairs of socks. What is the ones digit of ?

**A) 1 B) 2 C) 3 D) 9 E) NOTA**

9. Phineas and Ferb have triangular and rectangular faces, respectively.

**A) 2 B) 3 C) 4 D) 5 E) NOTA**

10. Mrs. Flynn asks Phineas and Ferb to paint their fence. The boys doubt they can do it alone, so they call up some of their friends. It takes 24 minutes for 6 people to paint 6 fences if everyone paints at the same rate. How many minutes does it take 9 people to paint 9 fences?

**A) 24 minutes B) 27 minutes C) 36 minutes**

**D) 54 minutes E) NOTA**

11. Perry the Platypus is out on a mission in the jungle. He stumbles across an incredible growing plant which doubles in height every day. If the plant grows to be 100 feet tall in 20 days, how many days did it take the plant’s height to reach 50 feet?

**A) 5 B) 10 C) 16 D) 17 E) NOTA**

12. Dr. Doofenshmirtz’s laser ray can only be activated if the four-digit password entered into the keypad is a multiple of 6. Which of the following codes could be the password?

**A) 2848 B) 5798 C) 7342 D) 9414 E) NOTA**

**Arithmetic**

13. Evaluate:

**A) -72 B) -64 C) 19 D) 30.6 E) NOTA**

14. Phineas and Ferb’s family is going out to the movies. They want to get in to the theater as quickly as possible. The admission prices at the movies are $8 for adults, $6 for senior citizens, and $5 for children. Quick—how much will it cost for 2 adults and 3 children to go see a movie?

**A) $19 B) $22 C) $31 D) $34 E) NOTA**

15. Since Phineas and Ferb are secretly building a beach in their backyard, they suggest that their family watch the movie Moana to set the mood. Inside the movie theater, there are *x* rows of seats. The first row has 9 seats, and each row has one more seat than the previous row. If there are a total of 100 seats in the movie theater, what is the value of *x*?

**A) 6 B) 7 C) 8 D) 9 E) NOTA**

16. Whoops! Phineas has messed up while assembling a snow cone machine and accidentally created a time machine. While testing it out, he sent his favorite piece of ice back in time. To get it back, Phineas must figure out how far back in time his favorite piece of ice went. Help Phineas and solve

**A) 5 B) 10 C) 12 D) 24 E) NOTA**

17. Phineas and Ferb built a spaceship! To get to the top of the rocket, Ferb has to climb up fifteen steps. The steps are numbered 1 through 15, and as Ferb climbs up he adds together all of the numbers on the steps. What is the final number Ferb ends up with?

**A) 5 B) 45 C) 90 D) 120 E) NOTA**

18. Buford knows that Baljeet loves prime numbers. Buford challenges him to find the product of the first four prime numbers, otherwise he’ll give him a wedgie! Help out Baljeet, what is the answer to Buford’s challenge?

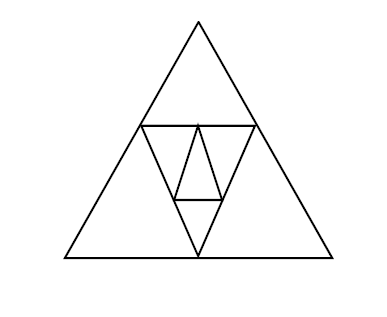
**A) 6 B) 15 C) 17 D) 30 E) NOTA**

**Shapes**

19. Phineas’ head is shaped like a triangle. Which of the following cannot be the measure of an angle in a triangle?

**A) 185° B) 165° C) 90° D) 40° E) NOTA**

20. Not only does Phineas have a triangular head, but he has a triangular brain too! Below is a diagram of Phineas’ brain. How many different triangles does this diagram contain?



**A) 8 B) 9 C) 10 D) 12 E) NOTA**

21. Unlike Phineas, Ferb’s head is a quadrilateral. Which of these facts about quadrilaterals are always true?

I. A rectangle is a square.

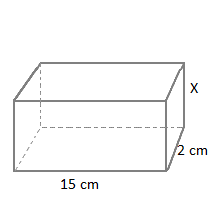
II. A square is a rhombus.

III. The four angles in a quadrilateral are all 90°.

**A) II only B) I and II only C) II and III only**

**D) none are true. E) NOTA**

22. Below is a diagram of Phineas’ toolbox. If the volume of the box is 210 cubic cm, then what is the value of x (the height)?



**A) 21 cm B) 9 cm C) 8 cm D) 7 cm E) NOTA**

23. Candace’s favorite shape is a dodecagon. How many sides does it have?

**A) 7 B) 9 C) 12 D) 20 E) NOTA**

24. Phineas has a stick that is 3 inches long, Ferb has one that is 4 inches long, and Candice’s is 5 inches. When they put them together to make a triangle, what is its area in square inches?

**A) 3 B) 6 C) 8 D) 12 E) NOTA**

**Clocks and Calendars**

25. Dr. Doofenshmirtz is quite the busy evil mastermind, but he still finds time to take care of his teeth! He has just finished scheduling a dentist appointment that will be in 50 days. Suppose today is Tuesday. On what day of the week will Dr. Doofenshmirtz have his dentist appointment?

**A) Tuesday B) Wednesday C) Thursday**

**D) Friday E) NOTA**

26. During one of Candace’s temper tantrums, she broke her favorite pink 12-hour clock. Now, instead of functioning normally, the clock loses 20 minutes each day. The clock will first return to the correct time in

**A) 12 days B) 24 days C) 36 days D) 54 days E) NOTA**

27. Candace is allergic to pollen, and has very bad reactions to it during the summer time. To help her survive pollen season, the doctor has given her 5 pills, telling her to take one every 45 minutes, starting with the first pill at 2:30 pm. At what time will she eat the 5th pill?

**A) 4:15 pm B) 5:30 pm C) 6:15 pm D) 6:30 pm E) NOTA**

28. Baljeet only eats when the angle between the minute and hour hand on his analog clock is exactly 90°. At which of the following times can he eat?

**A) 3:00 B) 3:30 C) 9:30 D) 12:45 E) NOTA**

29. Dr. Doofenshmirtz loves efficiency. His laser ray is set to go off at 9:00 a.m. Before setting it off to launch, he must wake up and spend exactly 17 minutes on personal hygiene, 25 minutes eating, 32 minutes planning his traps for Perry the Platypus, and finally 50 minutes making sure the laser is all set. He must get at least hours of sleep. Assuming, he does every action immediately following the previous action, when is the latest he could start to sleep, and still set off his laser at exactly 9:00?

**A) 8:10 p.m. B) 8:11 p.m. C) 9:10 p.m. D) 9:11 p.m. E) NOTA**

30. Now answer the most important question of them all. If school ends on May 31, 2019 and starts again on August 12, 2019, how many FULL days are *really* in summer vacation?

**A) 71 B) 72 C) 73 D) 74 E) NOTA**