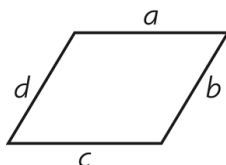
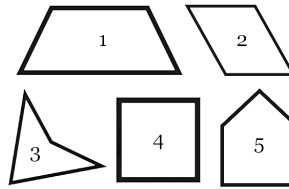


1. Gus drew a quadrilateral. Which pair of sides appear to be parallel?



- (A) a and b (B) c and a (C) c and b (D) d and a (E) NOTA
2. Paul has 172 trading cards. Eli has twice as many cards as Paul does. Then Paul gave away 24 cards to Jenny. How many trading cards do Paul and Eli have now, combined?
- (A) 492 (B) 540 (C) 234 (D) 282 (E) NOTA
3. There were 287 music books and 134 science books in the store. After some books were sold, there were 159 books left. How many books were sold?
- (A) 262 (B) 128 (C) 421 (D) 134 (E) NOTA
4. Chrissy has 3 bags with 8 marbles in each bag. Kurtis has 5 bags with 6 marbles in each bag. Who has more marbles, and by how much?
- (A) Chrissy; 6 (B) Kurtis; 6 (C) Kurtis; 12 (D) Chrissy; 12 (E) NOTA
5. Luca is obsessed with Massimo's "Trenette Al Pesto" recipe, and has been trying to recreate it with ocean ingredients. If $\frac{1}{2}$ cup of seaweed can be substituted for 3 cups of basil leaves, and the recipe calls for 10 cups of basil leaves, how much seaweed does he need to replace all of the basil in the recipe?
- (A) 5 cups (B) $\frac{10}{3}$ cups (C) $\frac{5}{3}$ cups (D) $\frac{1}{3}$ cup (E) NOTA
6. Harry wants to preserve his family tradition by making his great-grandmother's baklava recipe. However, all the measurements are in Roman numerals! If his grandmother asked him to use XVI tablespoons of flour, how many tablespoons of flour should he use, in normal numbers?
- (A) 14 (B) 106 (C) 24 (D) 15 (E) NOTA
7. Principal Jenny was gifted \$5400 by her school district, and wants to distribute the money equally amongst her 90 employees. How much money would each employee receive if equally distributed?
- (A) \$60 (B) \$80 (C) \$70 (D) \$90 (E) NOTA
8. Fiona and Philip were having a contest to see who would get more math questions right in 10 minutes. Fiona got 29 questions correct, and Philip got 41 questions correct. How many more questions did Philip get right than Fiona?
- (A) 28 (B) 12 (C) 22 (D) 18 (E) NOTA

9. Neil and Peter are chasing an art thief, who has locked himself inside an ancient underground chamber. In order to enter the chamber, they must determine which of the following shapes are not a quadrilateral. Which shape should Neil and Peter choose in order to enter the chamber?

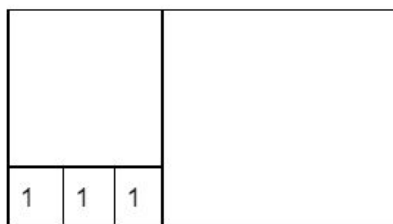


- (A) 1 (B) 2 (C) 3 (D) 4 (E) 5
10. Mr. Chang usually takes an half an hour to grade one essay, but there it took him 17 more minutes to grade Annie's essay. How many minutes did it take Mr. Chang to grade Annie's essay?
- (A) 32 (B) 13 (C) 77 (D) 47 (E) NOTA
11. Solana had a doctor appointment with Dr. Imani at 2:45 in the afternoon. However, Dr. Imani was 78 minutes late! At what time did the appointment begin?
- (A) 4:03 PM (B) 4:33 PM (C) 4:22 PM (D) 4:14 PM (E) NOTA
12. Students at a school are performing "Elfis and The Sleigh Riders" for their peers. They need to set up chairs for their audience, which comprises of 92 fourth graders, 86 fifth graders, 4 fourth grade teachers, and 5 fifth grade teachers. If no more than 20 chairs can be put in a row, how many rows of chairs will they need?
- (A) 9 (B) 10 (C) 7 (D) 13 (E) NOTA
13. Zella needs to be at a restaurant by 4 p.m. in order to make her reservation, but forgot to buy a present for her date! Referring to the map below for travel times, if she starts at quarter till three and goes to the watch store, where she spends 10 minutes, heads over to the flower stand from the watch store, where she spends 5 minutes, heads back home from the flower stand, where she spends 10 minutes and finally heads to the restaurant from home. Will she be able to make her reservation, and with how much time to spare or lose?

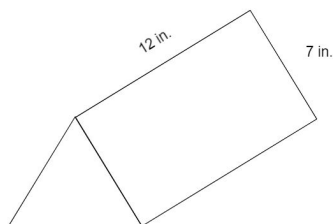


- (A) Yes; 18 minutes (B) No; 7 minutes (C) Yes; 7 minutes (D) No; 18 minutes (E) NOTA

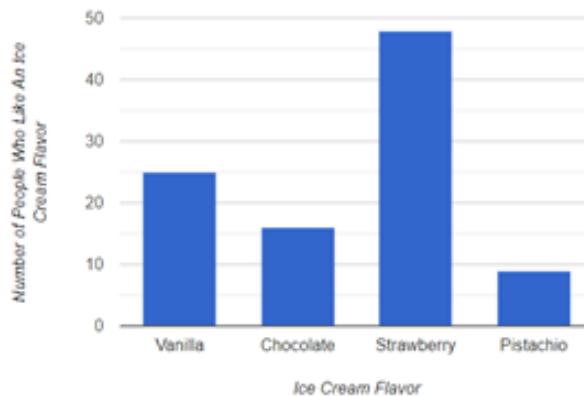
14. A large rectangular figure is composed of squares of various sizes, with the three smallest squares each having an area of 1. What is the area of the entire figure?



- (A) 28 (B) 5 (C) 25 (D) 16 (E) NOTA
15. A group of 10 cats weighs 420 grams. What is the weight of 2 cats, assuming they all weigh the same?
- (A) 200 grams (B) 84 grams (C) 20 grams (D) 840 grams (E) NOTA
16. What is the perimeter of the following 2D figure consisting of a triangle and rectangle, assuming all the side lengths of the triangle are equal?

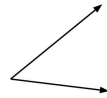


- (A) 19 inches (B) 52 inches (C) 45 inches (D) 38 inches (E) NOTA
17. Reyna took a survey of the number of people who liked different flavors of ice cream and created a graph to display her results. Based on the following graph, which flavor did more than 36 people like?

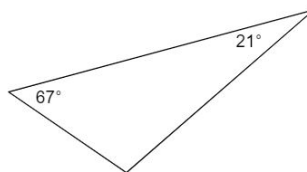


- (A) Vanilla (B) Chocolate (C) Strawberry (D) Pistachio (E) NOTA

18. Featured on the American reality television series “Undercover Boss,” CEO of the Philly Pretzel Factory Dan DiZio goes undercover in his company as a regular employee to discover the truth behind the company. DiZio is shocked to find that the store manager, rather than testing their employees on their ability to create proper pretzels, tests them on their math skills! Help DiZio figure out what kind of angle is pictured below so his cover isn’t blown.



- (A) straight (B) obtuse (C) acute (D) right (E) NOTA
19. Barney has a daughter that happened to be born on the exact same day that the award winning movie Space Jam was released, March 11th, 1997. Given that the date is March 11th, 2021, how old is Barney’s daughter today, in months?
- (A) 288 (B) 295 (C) 24 (D) 7 (E) NOTA
20. Leslie and Ben wanted to make some cookies! The recipe called for $2\frac{1}{2}$ cups of flour. Leslie had $1\frac{1}{4}$ cups of flour and Ben had $\frac{1}{2}$ cup of flour. How much flour did Leslie and Ben have combined?
- (A) $1\frac{1}{6}$ (B) $1\frac{2}{6}$ (C) $1\frac{3}{4}$ (D) $1\frac{1}{3}$ (E) NOTA
21. Using your answer from the previous question, how many cups of flour do Leslie and Ben need in order to satisfy what the recipe is asking for?
- (A) $\frac{3}{4}$ cup (B) 1 cup (C) $\frac{1}{4}$ cup (D) $\frac{1}{2}$ cup (E) NOTA
22. Manny accidentally sets Greg’s diary on fire, with the remains forming the triangle shown above. What is the measure of the remaining angle in the figure?



- (A) 98° (B) 92° (C) 88° (D) 102° (E) NOTA
23. On Planet Beastaria, dragonflies have 7 wings and bees have 11 wings. There are 205 dragonflies and 324 bees. How many wings are there in total?
- (A) 4854 (B) 4781 (C) 4523 (D) 4999 (E) NOTA

24. Viktor found a rope in his basement that was 12 yards long. If the rope was cut into 4 equal pieces, what is the length of each piece of rope?
- (A) 48 inches (B) 4 inches (C) 108 inches (D) 3 inches (E) NOTA
25. The Bluths go to Blaze Pizza and each order an 11 inch pizza for themselves. George Michael eats $\frac{7}{8}$ of his pizza, Lindsay eats $\frac{3}{4}$ of her pizza, Gob eats $\frac{1}{2}$ of his pizza, and Buster eats $\frac{2}{3}$ of his pizza. When Lucille gets back home she is angry that nobody ordered pizza for her, so the rest of the family combines their leftovers for her. What fraction of a pizza is left for Lucille to eat?
- (A) $\frac{29}{24}$ (B) $\frac{67}{24}$ (C) $\frac{17}{24}$ (D) $\frac{1}{2}$ (E) NOTA