

Math 6B Spring Semester MidtermFractions

1. $5 \div \frac{1}{3} =$

2. $\frac{5}{6} \div \frac{1}{3} =$

3. $\frac{3}{5} \div \frac{9}{10} =$

4. $\frac{5}{6} \div \frac{1}{3} =$

5. $\frac{5}{8} - \frac{1}{2} + \frac{3}{4} =$

6. $3 - \frac{1}{3} \div 4 =$

7. $\frac{2}{5} \times (\frac{3}{4} - \frac{3}{8}) =$

8. $16 - 4 \times 2 + 4 \div \frac{1}{2} =$

9. $\frac{5}{9} \div \frac{5}{6} - \frac{4}{5} \times \frac{3}{4} =$

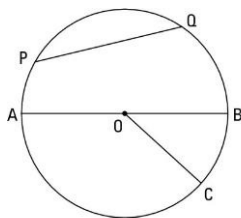
10. How many stones weighing $\frac{1}{10}$ pounds each will have a total weight of 9 pounds?

11. Jasmine had 120 grams of sugar. She used $\frac{3}{8}$ of it to bake a cake. How many grams of sugar does she have left?
12. Jasmine made 400 cakes. She sold $\frac{2}{5}$ of them and gave away $\frac{3}{4}$ of the remainder. How many cakes did she give away?
13. Bob spent $\frac{1}{7}$ of his money on a new microphone. If the microphone cost \$50, how much money did he have at first?
14. Alex spent $\frac{1}{4}$ of his money on a videogame and $\frac{1}{2}$ of the remainder on a lollipop. He spent \$10 altogether. How much money does he have left?

Circles

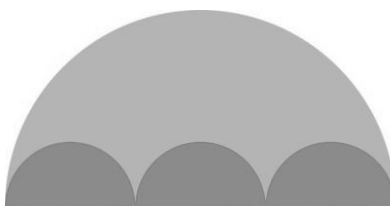
15. Write the formulas for the following (in terms of radius r & π)
- | | |
|------------------------------|---|
| a) Circumference of a circle | d) Area of a quarter-circle |
| b) Area of a circle | e) Area of one-tenth of a circle |
| c) Area of a semi-circle | f) Two expressions for π (decimal & fraction) |

16. According to the diagram on the right, the diameter is _____, the chord is _____, and the



radius is _____

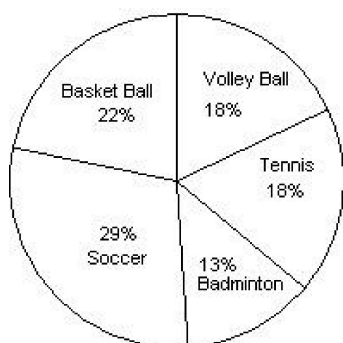
17. Use the following diagram to answer the questions. Leave answers in terms of π . (Radius of each small, dark gray semicircle is 2 cm.)



- What is the **perimeter** of the light grey region?
- What is the **area** of the three semicircles?
- What is the **area** of the largest semicircle?
- What is the **area** of the light grey region?

Graphs

Students Favorite Sports



A group of 500 students were surveyed to name their favorite sport.

- What was the most popular sport?
- What was the least popular sport?
- What **percentage** of the students chose tennis?
- How many **students** chose basketball?