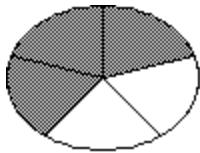


All exam answers are to be in simplest form. A scientific calculator may be used.
No notes, no books, no homework may be used while taking this exam.
Use blank spaces on the exam to show work. Attach all scratch paper to the exam.

Write a fraction to represent the shaded area of the figure.

1)



Write the fraction in simplest form.

- 2) Of the 263 students at a high school, 40 are sophomores.
What fraction of the students are sophomores?

Write the fraction in simplest form.

3) $\frac{105}{135}$

4) $-\frac{208}{221}$

Determine whether the pair of fractions is equivalent.

5) $\frac{2}{5}$ and $\frac{18}{45}$

6) $\frac{5}{6}$ and $\frac{35}{90}$

Find the prime factorization of the number.

7) 350

8) 4725

Find the least common multiple (LCM) of the list of numbers.

9) 21, 24

Write the fraction as an equivalent fraction with the given denominator.

10) $\frac{3}{8} = \frac{\quad}{40}$

11) $\frac{2}{3} = \frac{\quad}{30}$

Perform the indicated operation. Simplify your answers.

12) $\frac{1}{9} + \frac{5}{9}$

13) $\frac{3}{21} - \frac{2}{21}$

14) $-\frac{4}{29} - \frac{8}{29}$

15) $-\frac{1}{2} \cdot \frac{7}{8}$

16) $-\frac{6}{7} \cdot -\frac{2}{5}$

17) $\frac{3}{5} \cdot \frac{1}{6} \cdot \frac{1}{6}$

18) $6\frac{3}{7} \cdot 3\frac{8}{9}$

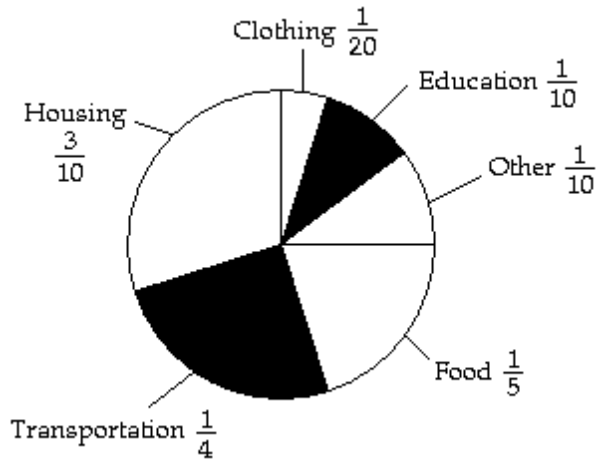
19) $\frac{16}{7} \div \frac{4}{7}$

20) $50 \div \frac{10}{3}$

21) $4\frac{4}{7} \div \frac{1}{7}$

22) $-\frac{7}{15} \div -\frac{1}{2}$

The circle graph below shows us how an average consumer spends money.
Use this information to answer the question.



- 23) What fraction of spending goes for clothing and food combined?
- 24) What fraction of spending goes for education, transportation, and other?
- 25) Suppose your family spent \$69,000 on the items in the graph above. How much might we expect was spent on education?

Perform the indicated operations. Round the result to the nearest thousandth if necessary.

- 26) $34.13 + 98.05 + 15.626$
- 27) $-2.9 - 10.3$
- 28) $4.3 - 4.8$
- 29) 36.7×1.6

30) $(-1.4) \div (-2.52)$

31) Subtract 0.0114 from 87

Solve.

32) One week in April in the town of Clearfield, it rained 0.87 inches on Monday, 1.46 inches on Thursday, and 0.83 inches on Saturday. It didn't rain the other four days. What was the total rainfall for the week?

33) In a practice run, a race car driver's speed is clocked at 145.047 mph at the end of his first lap, and at 162.996 mph at the end of the next lap. How much faster was he driving at the end of the second lap?