

1. Sketch a fraction bar model to show  $1/3 + 1/4 = 7/12$ .

2. Sketch a fraction bar model to illustrate the multiplication

$$2/3 \times 4/5$$

3. Sketch a fraction bar model to illustrate the division problem

$$2 \frac{1}{2} \div \frac{1}{2}$$

4. Find a fraction between  $3/4$  and  $5/6$

5. Clearly illustrate  $.35 \times 3$  using the decimal square model.

6. Convert  $\frac{3}{15}$  to a decimal (no calculator). Show all steps.

7. Convert  $.353535\dots$  to a rational number (no calculator)

8. There are 3 girls for every 5 boys in a class. There are 125 boys in the class. How many total students are in the class?

9. The coat was on sale for 40% off. If the original price was \$120 what was the sale price? Show your answer using the decimal square model.

10. Write as a fraction  $.2757575\dots$  (no calculator)

11. There are 125 mice in the field. My cat caught 5 mice. What percent of the mice did he catch? Solve using the decimal square model.

12. 15 is what percent of 120? Solve by setting up a proportion.

13. What is  $2.5 \times 10^{12} \times 7.9 \times 10^4$ ? Write the answer in scientific notation.

14. Illustrate  $.60 \div .15$  using the decimal square model.

15. What is  $4.57 \times 10^7 \div 6.2 \times 10^9$ ? Write the answer in scientific notation.

16. Joey went trick or treating and got lots of candy. He ate 10 pieces when he got home. While he was in bed, his mother ate  $\frac{1}{5}$  of his candy. Then his dad ate  $\frac{1}{4}$  of the remaining amount of candy. His sister got up early and ate  $\frac{1}{2}$  of what was left. Poor Joey woke up and found only 3 pieces of candy left. How many did he have to start?

17. Find a decimal between 0.25 and 0.26. Illustrate with a decimal square.

18. What is the missing  $x$ ?  $\frac{2}{5} = \frac{x}{10}$ . Illustrate your answer using a fraction bar.

19. Sketch a fraction bar model illustrating  $\frac{5}{6} - \frac{2}{3}$

## Answers

1. look at Activity Book section 5.3
2.  $8/15$ : look at Activity Book section 5.3
3. 5: look at Activity Book section 5.3
4. There is more than one answer,  $19/24$  works (so does  $4/5$ )
5. 1.05: See Activity book section 6.2
6.  $3/15 = 1/5 = 2/10 = 0.2$
7.  $35/99$
8. 200
9. \$72 (see Activity book section 6.3)
10.  $273/990$
11. 4%
12. 12.5%
13.  $1.975 \times 10^{17}$
14. 4: See Activity Book section 6.3
15.  $7.37 \times 10^{-3}$
16. 20
17. 0.255 (See Activity Book section 6.1)
18.  $x=4$  (See Activity Book section 5.2)
19.  $1/6$  (See Activity Book section 5.3)