

Everyday Mathematics

Grade 4 Unit 7

Name: _____

Write two equivalent fractions.

1. $\frac{1}{6}$

2. $\frac{3}{5}$

3. $\frac{6}{10}$

Compare. Write $>$, $<$, or $=$.

4. $\frac{1}{3}$ _____ $\frac{1}{5}$

5. $\frac{13}{14}$ _____ $\frac{3}{14}$

Compare. Write $>$, $<$, or $=$.

6. $\frac{3}{7}$ _____ $\frac{6}{14}$

Compare. Write $>$, $<$, or $=$.

7. $\frac{5}{16}$ _____ $\frac{3}{5}$

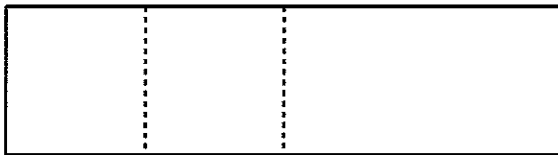
Write the set of fractions in order from smallest to largest.

8. $\frac{4}{10}$, $\frac{3}{10}$, $\frac{9}{10}$, $\frac{7}{10}$, $\frac{5}{10}$

9. $\frac{1}{3}$, $\frac{1}{14}$, $\frac{1}{2}$, $\frac{1}{7}$, $\frac{1}{8}$

10. If the pattern block trapezoid is the whole, what fraction of the whole is the pattern block triangle?

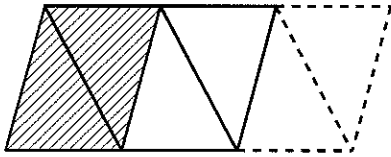
11. Look at the figure below.



- a. What fraction of the given rectangle are 2 squares? 1 rectangle?
b. What fraction of the rectangle do 2 squares and 1 rectangle cover?
-

12. If the cube represents $\frac{1}{10}$, what represents the unit whole?

13. Two triangles are $\frac{1}{2}$ of the whole. Write the name of the pattern block that is
- 1 whole
 - $1\frac{1}{2}$ whole



-
14. Sara had 8 quarters. She spent $\frac{1}{4}$ of them on video games.
- How many quarters did she spend?
 - How many quarters does she have left?
 - How much money does she have left?

-
15. A bag contains 4 blue blocks, 5 purple blocks, 4 green blocks, and 5 yellow blocks. You put your hand in the bag and pull out a block. About what fraction of the time would you expect to get a yellow block?

-
16. Plot and label each point on the coordinate grid.

A (6,2)

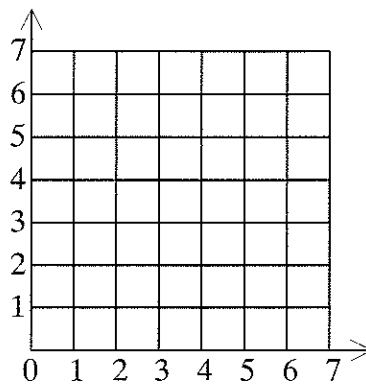
B $(4\frac{1}{2}, 1)$

C (2,1)

D $(1, 3\frac{1}{2})$

E (3,5)

F (6,6)



17. Multiply. Use a paper-and-pencil algorithm of your choice.

$$40 * 65 = \underline{\hspace{2cm}}$$

18. Multiply. Use a paper-and-pencil algorithm of your choice.

$$\underline{\hspace{2cm}} = 54 * 61$$

19. Divide. Use a paper-and-pencil algorithm of your choice.

$$65 \div 2 = \underline{\hspace{2cm}}$$

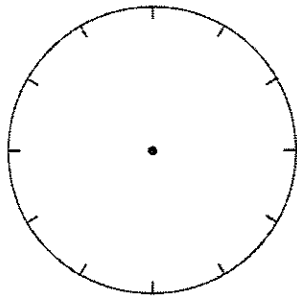
20. Divide. Use a paper-and-pencil algorithm of your choice.

$$7 \overline{)495}$$

21. Which fraction is larger: $\frac{5}{16}$ or $\frac{3}{5}$? Explain how you know.

22. a. Divide the spinner so that a paper clip will land on R about $\frac{1}{6}$ of the time and on B

about $\frac{1}{3}$ of the time. The remaining part of the spinner represents Y.



b. About what fraction of the time do you think the clip will land on Y?

23. Add or subtract. Use pattern blocks.

a. _____ = $\frac{6}{9} + \frac{3}{9}$

b. _____ = $\frac{2}{4} + \frac{2}{4}$

c. $\frac{3}{4} - \frac{1}{4} =$ _____

d. $\frac{6}{9} - \frac{1}{9} =$ _____

24. Solve using pattern blocks. Explain your strategy.

$$\frac{1}{6} + \frac{1}{3}$$

25. It took Denise $\frac{1}{3}$ of an hour to drive from Zion to Platt and $\frac{2}{6}$ of an hour to drive from Platt to Rome. To figure out her total driving time, Denise wrote the following number

model: $\frac{1}{3} + \frac{2}{6} = \frac{3}{9}$.

Do you agree that it took her about $\frac{3}{9}$ of an hour? Explain your answer.

[1] Sample answer: $\frac{3}{18}$ $\frac{10}{60}$

[2] Sample answer: $\frac{9}{15}$ $\frac{30}{50}$

[3] Sample answer: $\frac{3}{5}$ $\frac{12}{20}$

[4] >

[5] >

[6] =

[7] <

[8] $\frac{3}{10}, \frac{4}{10}, \frac{5}{10}, \frac{7}{10}, \frac{9}{10}$

[9] $\frac{1}{14}, \frac{1}{8}, \frac{1}{7}, \frac{1}{3}, \frac{1}{2}$

[10] $\frac{1}{3}$

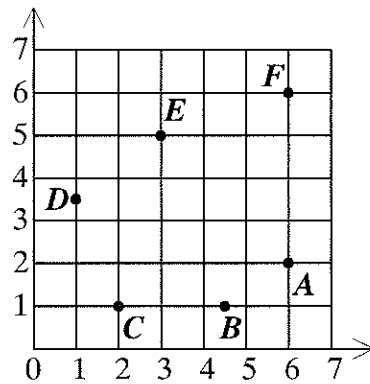
a. $\frac{1}{2}; \frac{1}{2}$
b. $\frac{1}{1}$

[12] the long

- a. parallelogram
[13] b. parallelogram
-

- a. 2 quarters
b. 6 quarters
[14] c. \$1.50
-

[15] $\frac{5}{18}$



[16]

[17] 2,600

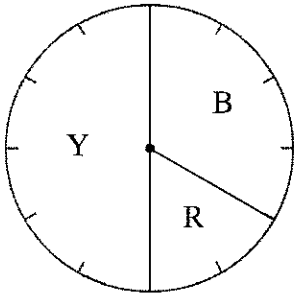
[18] 3,294

[19] Answer: $32\frac{1}{2}$

[20] $70\frac{5}{7}$

$\frac{3}{5}$
[21] Explanations will vary.

a. Sample answer:



[22] b. $\frac{1}{2}$

a. 1

b. 1

c. $\frac{2}{4}$

[23] d. $\frac{5}{9}$

$\frac{1}{2}$

[24] Explanations will vary.

Sample answer: No. Denise added the fractions by adding the numerators and adding
[25] the denominators. To add fractions, you have to find a common denominator first.

1. Queen Arlene's Dilemma

a. Queen Arlene has a problem. She wants to divide her land among her 4 daughters. She wants her oldest daughter to get $\frac{1}{3}$ of the land and her younger daughters to each get $\frac{1}{4}$ of the land. Can she do it? Explain your answer.

b. After thinking about it, Queen Arlene decides to keep $\frac{1}{2}$ of her land and have her 4 daughters divide the other $\frac{1}{2}$. She still wants the oldest daughter to get more land than her sisters. Think of a way to use fractions to divide the land. Explain your answer.

Sample answer:

a. No, she can not do it. If she gives her oldest daughter $\frac{1}{3}$ of the land, there is only $\frac{2}{3}$ left. If each of her younger daughters got $\frac{1}{4}$, that would be $\frac{3}{4}$. Since $\frac{3}{4}$ is greater than $\frac{2}{3}$, there is not enough land left.

b. If she gave her oldest daughter $\frac{1}{2}$ of what she wants to give away, that's $\frac{1}{4}$ of her land.

That leaves $\frac{1}{4}$ for her other three daughters. If she gives her other three daughters all the

[1] same amount, they would each get $\frac{1}{12}$ of her land.
