Grade 5 Summer Review

The Four Operations

1. Solve (without a calculator).

a. $1{,}035 \div 23$

b. 492×832

2. Solve.

a. $x - 56{,}409 = 240{,}021$

b. $7{,}200 \div Y = 90$

c. $N \div 14 = 236$

3. A $96 gadget is discounted 2/5 off of the normal price.
Find the discounted price.

4. Place parentheses into the equations to make them true.

a. $42 \times 10 = 10 - 4 \times 70$

b. $143 = 13 \times 5 + 6$

5. **a.** Draw a picture or a diagram to represent this situation:
The ratio of balls to squares is 5:2.

b. What is the ratio of squares to all shapes?

6. A bag has green and purple marbles in a ratio of 2:5.
If there are 133 marbles in all, how many are green?

7. A website charges a fixed amount for each song download.
If you can download 6 songs for $4.68, then how much would it cost to download 10 songs?

Large Numbers

8. Write the numbers.

a. 70 million 16 thousand 90

b. 32 billion 232 thousand

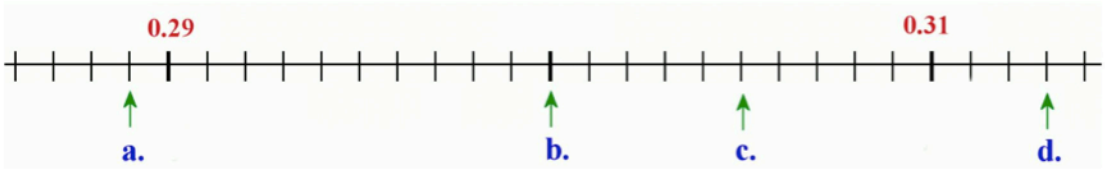
9. Estimate the result of 31,933 × 305.

10. Round these numbers to the nearest thousand, nearest ten thousand, nearest hundred thousand, and nearest million.

number	593,204	19,054,947
to the nearest 1,000		
to the nearest 10,000		
to the nearest 100,000		
to the nearest million		

Decimals

11. Write the decimals indicated by the arrows.



a. _____ **b.** _____ **c.** _____ **d.** _____

12. Complete.

a. $0.9 + 0.005 =$ _____ **b.** $0.28 +$ _____ $= 1$ **c.** $0.829 - 0.2 =$ _____

13. Write as decimals.

a. $\frac{8}{100} =$ **b.** $\frac{81}{1000} =$ **c.** $5\frac{21}{100} =$

14. Write as fractions or mixed numbers.

a. 0.048 **b.** 1.004 **c.** 7.22

15. Compare, and write $<$ or $>$.

a. 0.31 ☐ 0.031 **b.** 0.43 ☐ 0.093 **c.** 1.6 ☐ 1.29

16. Round the numbers to the nearest one, nearest tenth, and nearest hundredth.

rounded to...	nearest one	nearest tenth	nearest hundredth
5.098			

rounded to...	nearest one	nearest tenth	nearest hundredth
0.306			

17. Solve.

a. $0.4 \times 7 =$	**d.** $10 \times 0.005 =$	**g.** $0.11 \times 0.3 =$
b. $0.4 \times 0.7 =$	**e.** $100 \times 0.005 =$	**h.** $0.7 \times 0.9 =$
c. $0.4 \times 0.07 =$	**f.** $1000 \times 0.005 =$	**i.** $20 \times 0.09 =$

18. Divide.

a. $0.36 \div 6 =$	**c.** $3 \div 100 =$	**e.** $0.16 \div 10 =$
b. $0.056 \div 7 =$	**d.** $0.7 \div 10 =$	**f.** $71 \div 1000 =$

19. Two liters of ice cream is divided equally into nine bowls.
Calculate how much ice cream is in **TWO** bowls, to the nearest milliliter.

20. Karen and Ann share the cost of a DVD that costs $29.90 so that Karen pays 3/5 of it and Ann pays 2/5 of it.

a. Estimate how much each person will pay.

b. Find the exact amount of how much each person will pay.

21. A blue swimsuit costs $42 and a red swimsuit costs 5/6 as much. How much would the two swimsuits cost together?

Mark the $42 in the bar model. Mark what is not known with "??". Solve.

22. Calculate.

a. $7.140 \div 5$

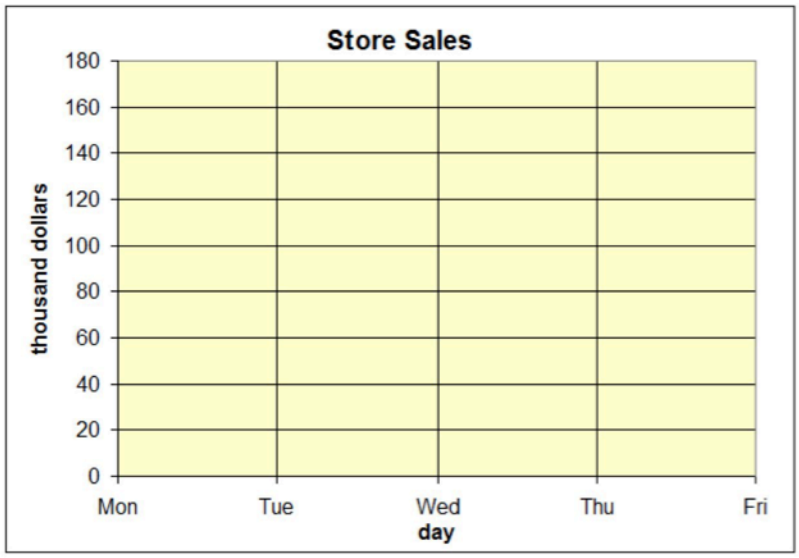
Graphs

23. The table below gives the amount of sales in a grocery store from Monday through Friday.

Day	Sales (thousands of dollars)
Mon	125
Tue	114
Wed	118
Thu	130
Fri	158

a. Make a line graph.

b. Calculate the average daily sales in this period.



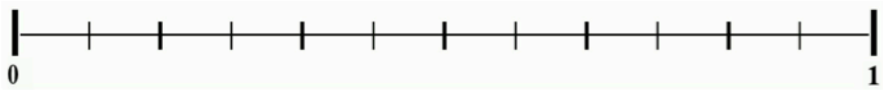
Describe the line graph and calculate the average daily sailes in this period.

Fractions

24. Add and subtract.

a. $3\frac{7}{9}$ $+\ 2\frac{5}{9}$	**b.** $5\frac{1}{6}$ $-\ 2\frac{5}{6}$	**c.** $3\frac{7}{10}$ $+\ 2\frac{8}{10}$ $+\ 7\frac{3}{10}$

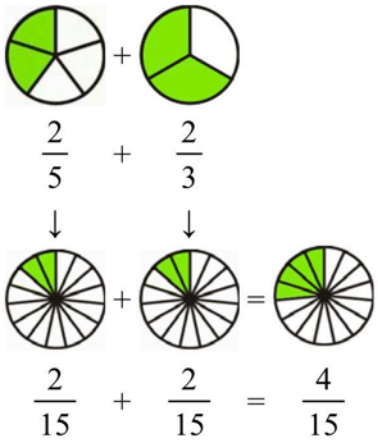
25. Mark the fractions on the number line. $\frac{3}{4}$, $\frac{1}{3}$, $\frac{4}{6}$, $\frac{5}{12}$



26. If you can find an equivalent fraction, write it. If you can not, cross the whole problem out.

a. $\frac{5}{6} = \frac{\quad}{20}$	**b.** $\frac{2}{7} = \frac{\quad}{28}$	**c.** $\frac{3}{8} = \frac{15}{\quad}$	**d.** $\frac{2}{9} = \frac{6}{\quad}$

27. Find the errors in Mia's calculation and correct them.



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

"I need these to have the same denominator."

$\frac{2}{15} + \frac{2}{15} = \frac{4}{15}$

28. Add and subtract the fractions and mixed numbers.

a. $\frac{1}{3} + \frac{5}{6}$

b. $\frac{4}{5} - \frac{1}{3}$

c. $6\frac{1}{8} - \frac{1}{2}$

d. $6\frac{7}{9} + 3\frac{1}{2}$

29. You need 2 3/4 cups of flour for one batch of rolls.
Find how much flour you would need for three batches of rolls.

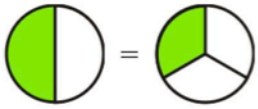
30. Compare the fractions, and write < , >, or = in the box.

a. $\frac{6}{9} \square \frac{6}{13}$ **b.** $\frac{6}{13} \square \frac{1}{2}$ **c.** $\frac{5}{10} \square \frac{48}{100}$ **d.** $\frac{1}{4} \square \frac{25}{100}$ **e.** $\frac{5}{7} \square \frac{7}{10}$

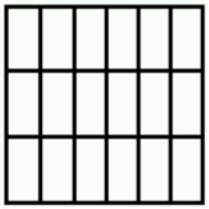
31. Simplify the following fractions if possible. Give your answer as a mixed number if possible.

a. $\frac{21}{15} =$	**b.** $\frac{29}{36} =$	**c.** $\frac{42}{48} =$

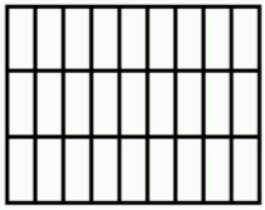
32. Is the following multiplication correct? If not, correct it.

$\frac{2}{3} \times$  $=$

33. Multiply the fractions, and shade a picture to illustrate the multiplication.



a. $\frac{1}{3} \times \frac{5}{6}$



b. $\frac{2}{9} \times \frac{2}{3}$

34. How many 5/8-inch pieces can you cut from a string that is 15 inches long?

35. Solve. Give your answer as a mixed number and in a simplified form.

a. $\frac{7}{6} \times 9$	**b.** $\frac{2}{7} \div \frac{3}{5}$
c. $\frac{4}{5} \times 3\frac{2}{3}$	**d.** $2\frac{1}{2} \div \frac{3}{9}$

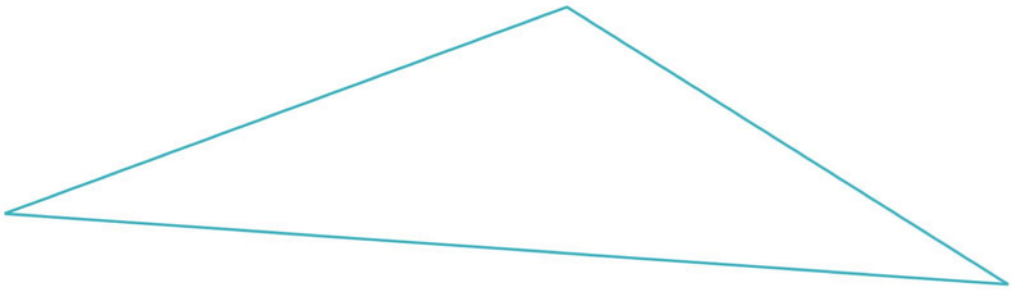
36. Jessie has a big bag of marbles. $\frac{2}{7}$ of them are red, $\frac{2}{7}$ of them are blue, and the rest are transparent.

a. What is the ratio of blue marbles to transparent marbles?

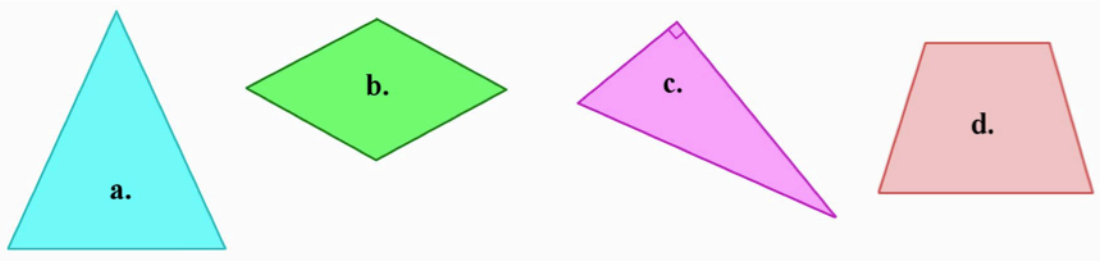
b. If there are 64 red marbles, how many marbles are in the bag?

Geometry

37. Measure the sides of the triangle in inches. Find its perimeter.



38. Below you see two triangles and two quadrilaterals. Name the triangles according to their sides and angles. Name the quadrilaterals.



a. _____

b. _____

c. _____

d. _____

39. **a.** A square has a perimeter of 12 cm. What is its area?

b. A square has an area of 25 cm^2. What is its perimeter?

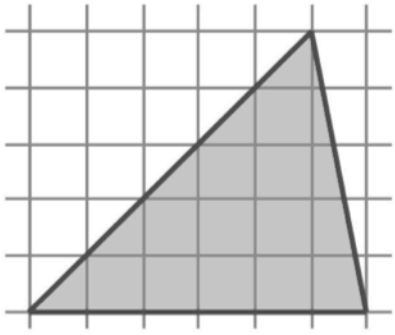
40. **a.** Draw a right triangle with 5 cm and 7 cm perpendicular sides.

b. Find its perimeter.

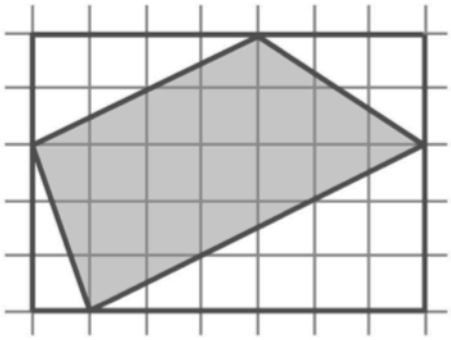
c. Find its area.

d. Measure its angles. They measure _____°, _____°, and _____°.

41. Find the areas of the shaded shapes in square units.



a. _____ square units

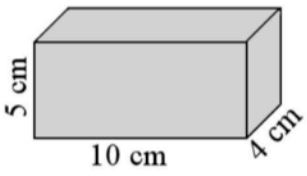


b. _____ square units

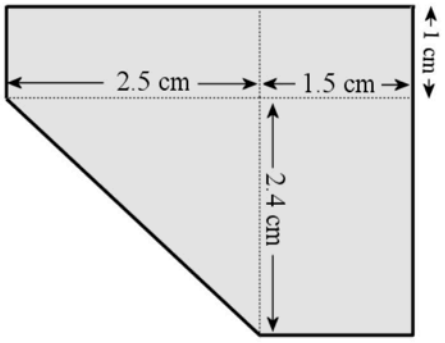
42. This is a rectangular prism.

a. Find its surface area.

b. Find its volume.



43. Find the area of the shape. The lines that look like meeting at right angles, do meet at right angles.



44. Matthew has a rainwater collection tank on his yard that is rectangular, like a box.
It is 1.2 m long, 60 cm wide, and 1 m tall.

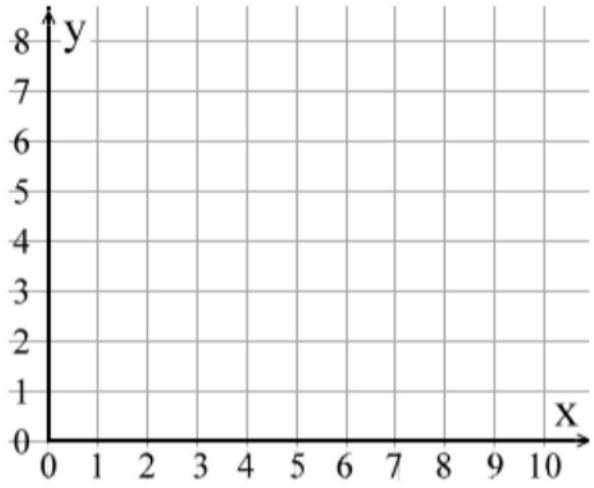
a. Find the volume of the tank in cubic meters.

b. One morning, after a rainy night, the tank is about 1/3 full.
About how many liters of water are in the tank?
(1 cubic meter equals 1,000 liters.)

45. **a.** Draw a shape with vertices at
(1, 1), (7, 1), (3, 4), and 9, 4).

b. What is the shape called?

c. Find the area of the shape in square units.

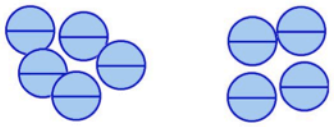
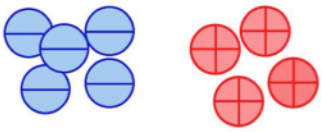
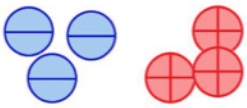


Integers

46. Compare. Write < or > between the numbers.

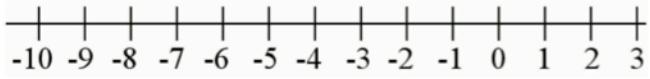
a. $-3 \square -6$	**b.** $2 \square -3$	**c.** $-9 \square -5$	**d.** $-4 \square 0$

47. Write an addition sentence to match the picture.

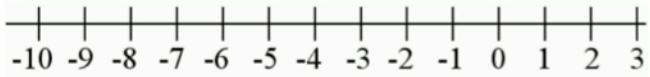
 **a.**	 **b.**	 **c.**

48. Draw a number line jump for each addition problem, and solve it.

a. $-9 + 6 =$ _____



b. $-3 + 5 =$ _____



49. Add.

a. $4 + (-7) =$	**c.** $2 + (-9) =$	**e.** $2 + (-8) + (-3) =$
b. $(-6) + 6 =$	**d.** $(-7) + (-8) =$	**f.** $(-4) + 2 + 9 =$

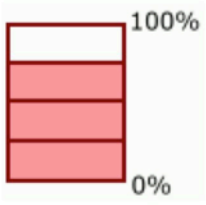
Percent

50. Write as percents, fractions, and decimals.

a. 2% = $\frac{\square}{\square}$ = _____	**b.** ____% = $\frac{70}{100}$ = _____	**c.** ___% = $\frac{\square}{\square}$ = 0.67

51. Write the fractions as percents.

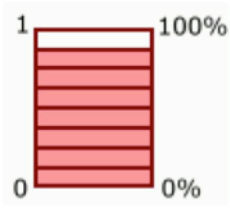
a.



colored: $\frac{\square}{\square}$ = ____%

not colored: $\frac{\square}{\square}$ = ____%

b.



colored: $\frac{\square}{\square}$ = ____%

not colored: $\frac{\square}{\square}$ = ____%

52. Fill in the table. Use mental math.

percentage / number	**1,100**	**500**	**70**	**31**
1% of the number				
7% of the number				
10% of the number				
40% of the number				