



1. Find the value of the digit 7 in each number.

374 562	57 214
702 345	1 470
89 703	7 245

2. Order each set from least to greatest.

a) 34 205, 34 025, 34 250

b) 78 901, 78 091, 79 001

c) 12 345, 12 354, 12 435

3. Which number is greater in each pair?

Explain how you know.

a) 49 999 or 50 001

b) 305 678 or 305 687

4. Fill in the blanks.

a) 4 000 = _____ hundreds

b) 3 200 = _____ hundreds

c) 45 000 = _____ thousands

5. Write each number in **two different ways**.

a) 3 450

b) 12 300

6. Add 1000 or subtract 100 to from each number to fill out the table below:

Number	+1000	-100
4 235		
8 970		
12 450		
7 099		

7. Which fraction is greater?

Explain how you know.

a) $\frac{3}{4}$ or $\frac{2}{3}$

b) $\frac{5}{8}$ or $\frac{1}{2}$

8. Find the equivalent fractions and fill out the table. Hint: Use fraction tiles if you have them!

Fraction	Equivalent
$\frac{1}{2}$	
$\frac{3}{5}$	
$\frac{2}{3}$	

9. Place these fractions on a number line from 0 to 1.

$\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$



10. Which is closest to 1? Use a number line to help explain your thinking.

a) $\frac{7}{8}$ or $\frac{3}{4}$

b) 0.9 or 0.99



11. Write $\frac{3}{10}$ as a decimal

12. Write 0.6 as a fraction

13. Add **0.5** to each number in column 2 and subtract **0.2** from each number in column 3 to complete the table below.

Number	+0.5	-0.2
2.3		
5.7		
1.8		

14. Compare each pair of numbers.

Circle the greater number and explain how you know.

a) 0.5 or 0.45

b) 0.9 or 0.89

15. Round each number to the nearest **1 000**. Explain how you decided whether to round up or down.

a) 4 682

b) 7 349

16. Estimate the sum of **4 982 + 3 121**.

Which is the better estimate?

a) 8 000

b) 9 000

Explain how you know your estimate is reasonable.

17. Without calculating exactly, determine which sum is greater. Explain your thinking.

$398 + 205$ or $400 + 200$

18. Without calculating exactly, decide whether 36×5 is closer to **150** or **200**.
Explain how you know.

19. $0.5 > 0.45$
Is this statement true or false?
Explain your reasoning.

20. $2/4 = 1/2$
Is this statement always true?
Explain how you know.

21. Write a number that is between **3.4 and 3.5**.

Explain how you know your number is between these two values.

22. Write **three different numbers** between **0.6 and 0.7**.

Explain how you know each number fits.

23. What is the value of the digit **7** in the number **3.72**?

24. Circle the greater number. How do you know?

0.6 0.56



25. Create a number between **45 000 and 46 000** that has a **7 in the hundreds place**. Explain how you know your number meets both conditions.

26. Find **two different ways** to make **10 000** using addition. Show your thinking.

27. Create two addition expressions that both have a sum close to **6 000**. Explain how you know which sum is greater.



28. Estimate the sum of **$4\,982 + 3\,121$** .

Explain the strategy you used and why your estimate is reasonable.

29. Find **three different fractions** that are equal to **$1/2$** .

Explain how you know they are equivalent.

30. Which fraction is greater: **$5/8$ or $3/4$** ?

Show your thinking using a model, numbers, or words.



31. Write **three different numbers** between **3.4 and 3.5**.
Explain how you know each number fits.

32. A student says: “0.5 is greater than 0.45 because 5 is greater than 45.”
Do you agree or disagree?
Explain your thinking.

33. A student says: “ $6 \times 40 = 2400$ ”
Explain the mistake and show the correct answer.

34. Two students solved **$398 + 205$** in different ways.

Student A:

$$398 + 200 = 598$$

$$598 + 5 = 603$$

Student B:

$$400 + 205 = 605$$

$$605 - 2 = 603$$

a) Explain how each student solved the problem.

b) Which strategy makes more sense to you? Why?

35. Which is greater: **$\frac{2}{3}$ or 0.6** ?

Explain your thinking using a model, numbers, or words.

36. What happens when you multiply a number by **10**?
Give at least two examples and explain your thinking.

37. Which One Doesn't Belong?
Explain your reasoning.

0.5	0.50
$\frac{1}{2}$	0.45

38. A number is **very close to 50 000**, but it is less than 50 000.
What might the number be?
Explain how you know it is close.



39. Write a number that can be represented as:
3 thousands + 12 hundreds
What is the number? Explain how you know.

40. A student says: “ $\frac{3}{6}$ is greater than $\frac{1}{2}$ because 3 is greater than 1.”
Do you agree or disagree?
Explain your thinking.

41. A student says: “0.8 is smaller than 0.75 because 8 is less than 75.”
Do you agree or disagree?
Explain your thinking.



42. Find **two fractions** that are both greater than **$1/2$** but less than **1**.
Explain how you know.

43. Without calculating exactly, determine which is greater.
Explain how you know.

49×6 or 50×6

44. Create a number that:
is greater than 3.5
is less than 4
has a 2 in the tenths place
Explain how you know your number fits all conditions.



42. Find **two fractions** that are both greater than **$\frac{1}{2}$** but less than **1**.
Explain how you know.

43. Without calculating exactly, determine which is greater.
Explain how you know.

49×6 or 50×6

44. Create a number that:
is greater than 3.5
is less than 4
has a 2 in the tenths place
Explain how you know your number fits all conditions.



45. What happens when you add **0.1** to a number?
Give at least two examples and explain your thinking.

46. Without calculating exactly, decide whether the sum of **3 982 + 2 105** is closer to **6 000** or **7 000**.
Explain how you know.



47. You are choosing between two snacks:

Snack A: You eat $\frac{3}{4}$

Snack B: You eat $\frac{2}{3}$

a) Which snack gives you more?

b) How do you know?

c) Show your thinking using a model, numbers, or words.

48. Fill in the blanks to make a true statement:

___ + ___ = about 6 000

- a) What numbers did you choose?
- b) How do you know your answer is reasonable?
- c) Create a different solution.

49. A number:

is greater than **30 000**

is less than **40 000**

has a **5 in the tens place**

- a) What might the number be?
- b) Explain how you know it meets all conditions.
- c) Find a different number that also works.



50. Find:

one **fraction**

one **decimal**

that are both **between 0.5 and 0.75**

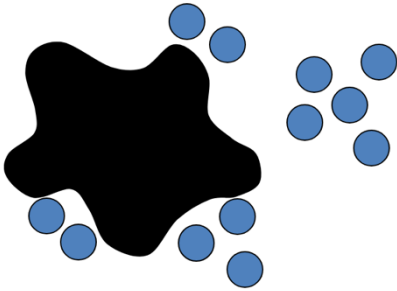
a) What are your numbers?

b) Which one is greater?

c) How do you know they both fit between 0.5 and 0.75?

1. Here is a Splat! problem to solve. If there are 18 blue dots altogether, how many are hiding under the splat? Can you write the “fact family” of related equations that connect to this image?

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2. Solve using a make-10 strategy (e.g., $7 + 6 = 7 + 3 + 3 = 10 + 3 = 13$).

$8 + 6$	$9 + 7$
$5 + 8$	$6 + 9$



3. Solve using near doubles (e.g., $8 + 9 = 8 + 8 + 1 = 16 + 1 = 17$).

$6 + 7$	$8 + 9$
$5 + 6$	$9 + 10$

4. Solve using think addition (e.g., $18 - 16$ because $16 + 2 = 18$)

$13 - 9$	$14 - 12$
$20 - 17$	$15 - 8$



5. Solve using a bridging-10 strategy ($13 - 7 = 13 - 3 - 4 = 10 - 4 = 6$)

12 - 4	15 - 8
14 - 9	19 - 12

6. Solve using a subtract from 10 strategy (e.g., $14 - 7 = 10 - 7 + 4 = 3 + 4 = 7$)

12 - 5	15 - 8
13 - 9	17 - 9

7. Add using friendly numbers:

$198 + 7$	$299 + 86$
$17\,495 + 10\,466$	$39\,998 + 629\,297$



8. Subtract using compensation:

$578 - 299$

$50\,000 - 2999$

$356\,000 - 97\,000$

$402\,000 - 198\,999$



9. Use a place value strategy to add or subtract:

$1584 + 215$

$15\,704 + 130\,260$

$3\,454 - 221$

$537\,998 - 32\,455$



10. Solve

$465 + 3940$

$37\,452 + 539\,278$

$6200 - 4197$

$703\,560 - 25\,600$



11. Fill in the blank. Show your thinking. How can you check if your answer is correct?

a) $3\,299 + \underline{\hspace{2cm}} = 40\,000$

b) $\underline{\hspace{2cm}} - 250\,000 = 175\,000$

c) $60\,000 = 48\,999 + \underline{\hspace{2cm}}$

12. Decide which equations are valid. Fix the ones that are not.

a) $800\,000 - 299\,999 = 799\,999 - 299\,999 + 1$

b) $800\,000 - 299\,999 = (800\,000 + 1) - (299\,999 - 1)$

c) $800\,000 - 299\,999 = 799\,999 - 299\,999 - 1$

d) $800\,000 - 299\,999 = (800\,000 - 1) - (299\,999 - 1)$



13. Which expression gives a result closest to 200 000?

- a) $150\,467 + 76\,068$
- b) $81\,022 + 121\,193$
- c) $237\,853 - 48\,903$
- d) $543\,190 - 250\,902$

14. Which is more: $4 - 1.9$ or $1.6 + 0.35$?

Explain or show your thinking.



15. Order the sums from least to greatest:

$11.3 + 4.1$, $9.9 + 5.23$, $9 + 6.05$, $5.3 + 9.7$

16. Estimate $3.643 + 4.467$ using the strategy indicated.

- a) Round each number to the nearest whole number

- b) Round each number to the nearest tenth

- c) Round each number to the nearest hundredth

- d) Front-end round each number

- e) Front-end round only one number

Which strategy is closest to the actual sum?



17. Estimate $14.343 - 6.805$ using the strategy indicated.

a) Round each number to the nearest whole number

b) Round each number to the nearest tenth

c) Round each number to the nearest hundredth

d) Front-end round each number

e) Front-end round only one number

Which strategy is closest to the actual difference?



18. Draw an area model for each multiplication sentence. Then solve using your model.

4×37	86×5
6×247	16×39
43×52	609×23



19. Fill in the blank to make each equation true.

a) $4 \times 23 = 4 \times \underline{\quad} + 4 \times 3$

b) $5 \times 321 = 5 \times 300 + 5 \times \underline{\quad} + 5 \times 1$

c) $56 \div 4 = 40 \div 4 + \underline{\quad} \div 4$

d) $960 \div 8 = \underline{\quad} \div 8 + 160 \div 8$



20 Multiply. Show your strategy. Challenge: Use a variety of strategies.

23×6	8×401
9×247	16×45
99×38	302×15



21. Divide. Show your strategy. Challenge: Use a variety of strategies.

$69 \div 3$

$96 \div 4$

$125 \div 5$

$560 \div 8$

$347 \div 6$

$909 \div 7$

22. Calculate the following. Show your strategies. Challenge: Can you use a different strategy for each question?

$48.5 + 21.9$	$31.2 + 7.998$
$58.21 - 23.4$	$8.603 - 2.95$
24×37	46×25
348×15	$256 \div 4$
$247 \div 13$	$948 \div 26$



23. Choose three questions:

$8+7$

$28+17$

$80+70$

$258+37$

$488+357$

$8000+7000$

What different strategies can you use to add these numbers?

How can you use one question to help you think about a different question?

How are the numbers related?

Show or record how you figured out the answers using at least two different strategies.



24. Choose three questions:

$679+58$

$236+474$

$4500+7250$

$8999+3331$

$67809+20601$

What different strategies can you use to add these numbers?

Show or record how you figured out the answers using at least two different strategies.



25. Choose three questions:

3×4

4×8

6×8

4×16

8×12

16×12

16×16

What different strategies can you use to multiply these numbers?

How can you use one question to help you think about a different question?

How are the numbers related?

Show or record how you figured out the answers using at least two different strategies.



26. Choose three questions:

$12 \div 3$

$18 \div 6$

$36 \div 4$

$72 \div 8$

$80 \div 10$

$160 \div 10$

$160 \div 16$

What different strategies can you use to divide these numbers?

How can you use multiplication to think about division?

Show or record how you figured out the answers using at least two different strategies.



27. Choose at least three of these math equations to solve:

$59 + \underline{\quad} = 82$

$230 + \underline{\quad} = 520$

$\underline{\quad} + 90 = 285$

$92 - \underline{\quad} = 65$

$951 - \underline{\quad} = 496$

$948 + \underline{\quad} = 2020$

Use items to move around, drawings or mental math strategies.

Could you re-write the equation in a different way to help you think about it?

How does this make you think about how addition and subtraction are related?

How will you record and share your thinking?



28. Choose at least three of these math equations to solve:

$3 \times \underline{\quad} = 21$

$4 \times \underline{\quad} = 44$

$9 \times \underline{\quad} = 81$

$15 \times \underline{\quad} = 165$

$25 \times \underline{\quad} = 500$

$25 \times \underline{\quad} = 2000$

Use items to move around, drawings or mental math strategies.

How does this make you think about how multiplication and division are related?

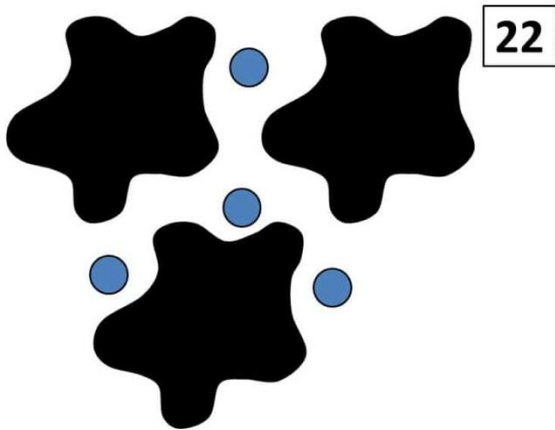
How will you record and share your thinking?

29. Here is a Splat! problem to solve.

There are 22 blue dots altogether. Each black splat has the same number of blue dots under it. How many blue dots are under each splat?

Share how you solved this with a drawing or a video.

Create your own Splat! problem?





30. Choose three of these math equations to solve:

$99 + \underline{\quad} = 175$

$275 + 850 = \underline{\quad}$

$1000 + \underline{\quad} = 2500$

$10 \times \underline{\quad} = 360$

$\underline{\quad} \times 20 = 480$

$250 \times \underline{\quad} = 1000$

Use mental math strategies such as decomposing or compensating. Think about how addition and subtraction are related and how multiplication and division are related.

How will you record and share your thinking?

31. Choose three questions:

$3\,000 - 1\,799$

$5\,100 - 625$

$7\,475 - 2\,850$

$50\,350 - 6\,792$

$58\,000 - 24\,658$

$619\,000 - 45\,889$

Solve each question using at least two different strategies.

How could an open number line show an “adding up” strategy?

Use numbers, symbols and/or words to represent your thinking.



32. Choose an answer: 1.4 or 5.59 or 9.468

Can you think of three different subtraction (removal or find the difference) questions that have this answer. What materials like blocks, or tools like ten-frames, could help you with this task? Record your questions with pictures, numbers or words.



33. Choose three questions:

$7.5 - 2.9$

$6.3 - 4.89$

$1.75 - 0.97$

$10.459 - 5.8$

$49.805 - 24.999$

Solve each question using at least two different strategies.

How could an open number line show an “adding up” strategy?

Use pictures, numbers, symbols and/or words.



34. Solve each of the equations below.

How does the first question help you solve the other questions?

Show and describe your thinking using pictures, numbers, symbols and words.

$$3 \times 5 =$$

$$3 \times 50 =$$

$$13 \times 50 =$$

35. An array is a rectangle of items in columns and rows.
Here is an array for the multiplication equation 3×4 .



Solve at least three of these questions:

2×16

3×18

8×8

12×15

15×21

Draw an array for each equation. What other multiplication questions or smaller arrays can you see within your large arrays? How do these smaller arrays help you to solve the multiplication question for the large arrays?



36. Add or subtract one of the following sets (A or B) of decimal numbers:

A) $4.3 + 2.8$ $9.2 - 4.7$

B) $2.036 - 0.947$ $8.999 + 6.038 + 5.256$

Show how you solved each question using diagrams, words and numbers. If you used a specific strategy, name the strategy as well.



37. Complete at least three of the following subtraction questions:

$4.9 - 2.8$

$8.2 - 3.9$

$4.00 - 2.85$

$9.206 - 0.899$

$8.659 - 1.088 - 2.5$

Show how you solved each question using diagrams, words and numbers. If you used a specific strategy, name the strategy as well.



38. Complete at least three of the following addition questions:

$2.3 + 2.9$

$5.5 + 4.7$

$4.55 + 2.85$

$4.903 + 0.747$

$6.999 + 9.009 + 5.129$

Show how you solved each question using diagrams, words and numbers. If you used a specific strategy, name the strategy as well.



39. Here is a math problem to solve. *What strategies will you use to solve it? You could draw a picture, you could use mental math, decomposing or regrouping, or you could use another strategy. Try more than one strategy and record your strategies and your solution. Share your reasoning to explain your solution.*

Each box of oranges holds 24 oranges. A crate holds 12 boxes of oranges. If a market wanted to have 1000 oranges for a special sale, how many crates of oranges would they need to order? (Note: The market can only order the oranges by whole crates, not partial crates.)



40. Here are some math problems to help us review what we have learning about decimal numbers.

a) What whole numbers could you subtract to help you figure out $4.5 - 2.14$?

b) What would you have to add to 3.8 to get to 5.13? How could you write that as an equation?

c) Draw a picture to show why $0.12 < 0.4$.

What strategies will you use for each type of question? How does the type of question change which strategy you might use?

Pose your own math problem involving decimal numbers.



41. Let's think flexibly about multiplication. Write out the questions, answer the missing parts.

a) If $3 \times 4 = 12$

then $6 \times 4 =$

and $3 \times 8 =$

b) If $16 \times 12 = 192$

then $8 \times 12 =$

and $4 \times 12 =$

c) If $20 \times 12 = 240$

then $2 \times 12 =$

and $200 \times 12 =$

42. Let's think flexibly about division. Write out the questions, answer the missing parts.

a) If $24 \div 8 = 3$

then $24 \div 4 =$

b) If $15 \div 3 = 5$

then $5 \times \underline{\quad} = 15$

and $\underline{\quad} \times 5 = 15$

c) If $250 \div 10 = 25$

then $10 \times \underline{\quad} = 250$

and $10 \times \underline{\quad} = 500$



43. Choose one of the following math questions to inspire a math story problem. Pose your problem using words and numbers and draw a picture or diagram to show how you will solve the problem. Choose an equation that will challenge your thinking.

- a) $8 \times 12 = \underline{\quad}$
- b) $92 \div 4 = \underline{\quad}$
- c) $\$2.75 + \$19.78 = \underline{\quad}$
- d) $\$7.62 - \underline{\quad} = \4.85

Extension: Rewrite your story problem to show a different meaning of the operation you chose. Explain what makes it different.



44. Here is a math problem to solve: I opened a package of seeds and planted 6 rows of seeds in the garden. Each row had 24 seeds. I planted some more in a pot. I used up all 170 seeds in the package of seeds. How many seeds did I plant in the pot?

What strategies will you use to answer the problem? Share your thinking.



45. Choose two of the following math questions:

$2.8 + 1.7 =$

$7.1 - 2.7 =$

$2.17 + 3.98 =$

$7.43 - 2.85 =$

What different ways can you figure each question out? How does thinking about strategies with whole numbers help you solve these questions? Record and share at least two different ways for solving these questions.



46. Pick two or more of the relationships below. Use pictures, numbers, words, and specific examples to explain each relationship.

- a) Addition and subtraction
- b) Multiplication and division
- c) Multiplication and addition
- d) Division and subtraction



47. The answer is 480. What could the math question be? Think of at least four different questions. Can you think of a question for each operation (addition, subtraction, multiplication and division)?



48. Tell me what you know about 3×6 or $18 \div 3$

Use words, pictures, numbers, symbols, and materials to represent your thinking.

How are the two options related?

49. Describe a situation where you might estimate rather than calculating an exact answer.



50. You have three estimates for $299,899 + 189,999$:

a) $300,000 + 200,000$

b) $300,000 + 190,000$

c) $200,000 + 100,000$

Describe the strategy that was used for each estimation. Rank them in order of accuracy to the actual sum. Which strategy do you like best and why?



51. Subtracting numbers like $100\,000 - 368\,493$ is challenging using the traditional stacking method.

What is another way to think about this problem that makes it easier to solve?

Hint: Can we use a friendlier number than $100\,000$ so that we do not have to regroup?

52. Show two ways to calculate $8 - 3.999$. Which way do you prefer and why?



53. Choose one:

- a) Describe two different meanings of subtraction.
- b) Describe two different meanings of division.

For each meaning, create a story problem related to your life or the community in which you live. How will you share your story problems?



54. Explain how multiplication helps you to divide. Use a specific example to help convey your ideas clearly.

55. Create a “Which one doesn’t belong?” using equations. Can you think of a reason why each one does not belong?

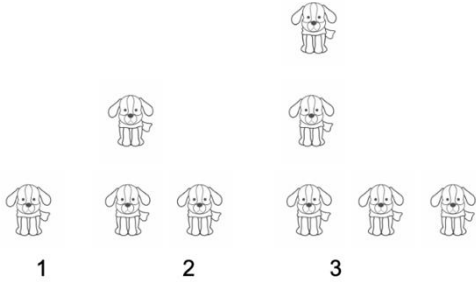


56. Create two or more story problems that can be solved by 24×6 . Each story problem should demonstrate a different meaning of multiplication. Explain which meaning each problem shows.



57. Create two or more story problems that can be solved by $246 \div 4$. Each story problem should demonstrate a different meaning of division. Explain which meaning each problem shows.

1. How do you see the pattern growing? Describe the pattern in words.



2. Create a decreasing pattern. Draw the first 3 steps and write a pattern rule to describe the pattern.

3. Write a pattern rule to describe the following patterns. Classify each pattern as repeating, increasing or decreasing

a.

1	2
2	4
3	6
4	8

b. Clap, clap, stomp, clap, snap, clap, clap, stomp, clap, snap

c. 25, 20, 15, 10

4. A pattern contains the numbers 6 and 12. Build 3 different patterns that could contain these numbers. Write a pattern rule for each one.

5. Work with a partner. Take turns building different patterns. One partner builds a pattern and the other partner names the pattern rule, names the type of pattern (repeating, increasing, decreasing) and tells what comes next.

6. Fill in the missing numbers in the pattern.

a.

4	5
	6
6	

b.

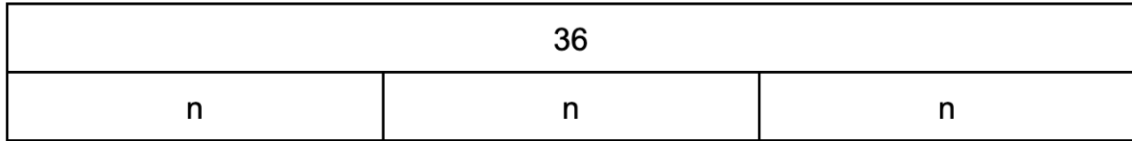
50	100
40	80
30	

c.

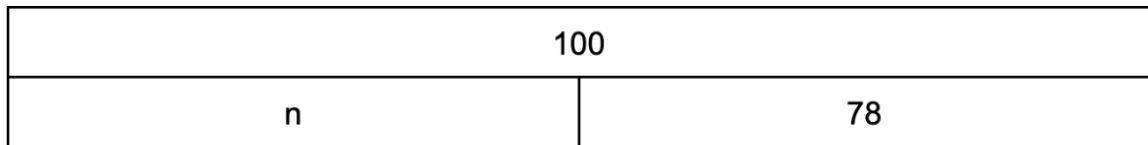
1	8
2	10
3	
4	
5	18

7. Write a word problem and an equation that represents the bar model.

a.



b.



8. Solve.

a. $2 + n = 55$

b. $4n = 48$

c. $7 = n - 6$

d. $24 = n / 3$



9. Mani needs to fill 24 baskets with apples. They fill 4 baskets on the first day, but only 2 baskets each day after that. How many days will it take Mani to fill the 24 baskets? Draw a picture and write an equation to represent the pattern.

10. Ella is saving money to buy a new bike. The bike costs \$100. Write an equation to show how Ella could save her money:

- a. If she saves the same amount each week.
- b. If she saves \$2 more than the week before every week.



1. Find the missing measurement.

a. Length = 5 Width = 6 Area = ?

b. Length = ? Width = 12 Area = 96

c. Length = 36 Width = ? Area = 540

2. Lani needs space on the floor for 6 boxes. Each box has a length of 41 cm and a width of 35 cm. How much floor space does Lani need?



3. A rectangular movie screen is 24 meters long and 29 meters high. Show 3 ways you can find the area of the screen.



4. The area of a rectangle is 24 meters.
- Draw all possible rectangles with this area.
 - Calculate the perimeter of each rectangle.

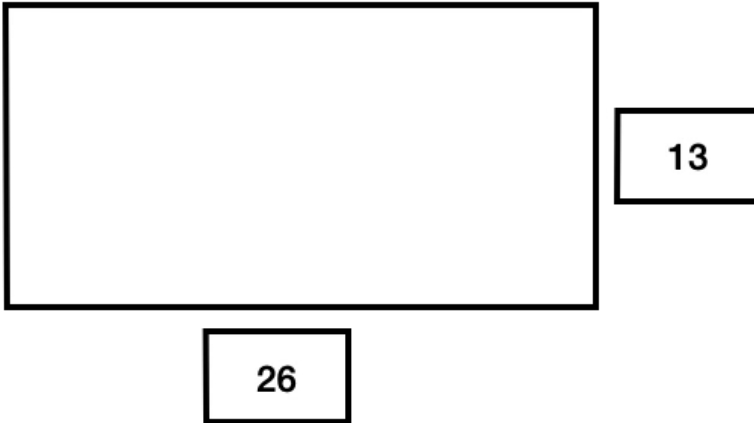


5. Find the missing measurements.

a. Area = 15 Perimeter = 16 Width = ? Length = ?

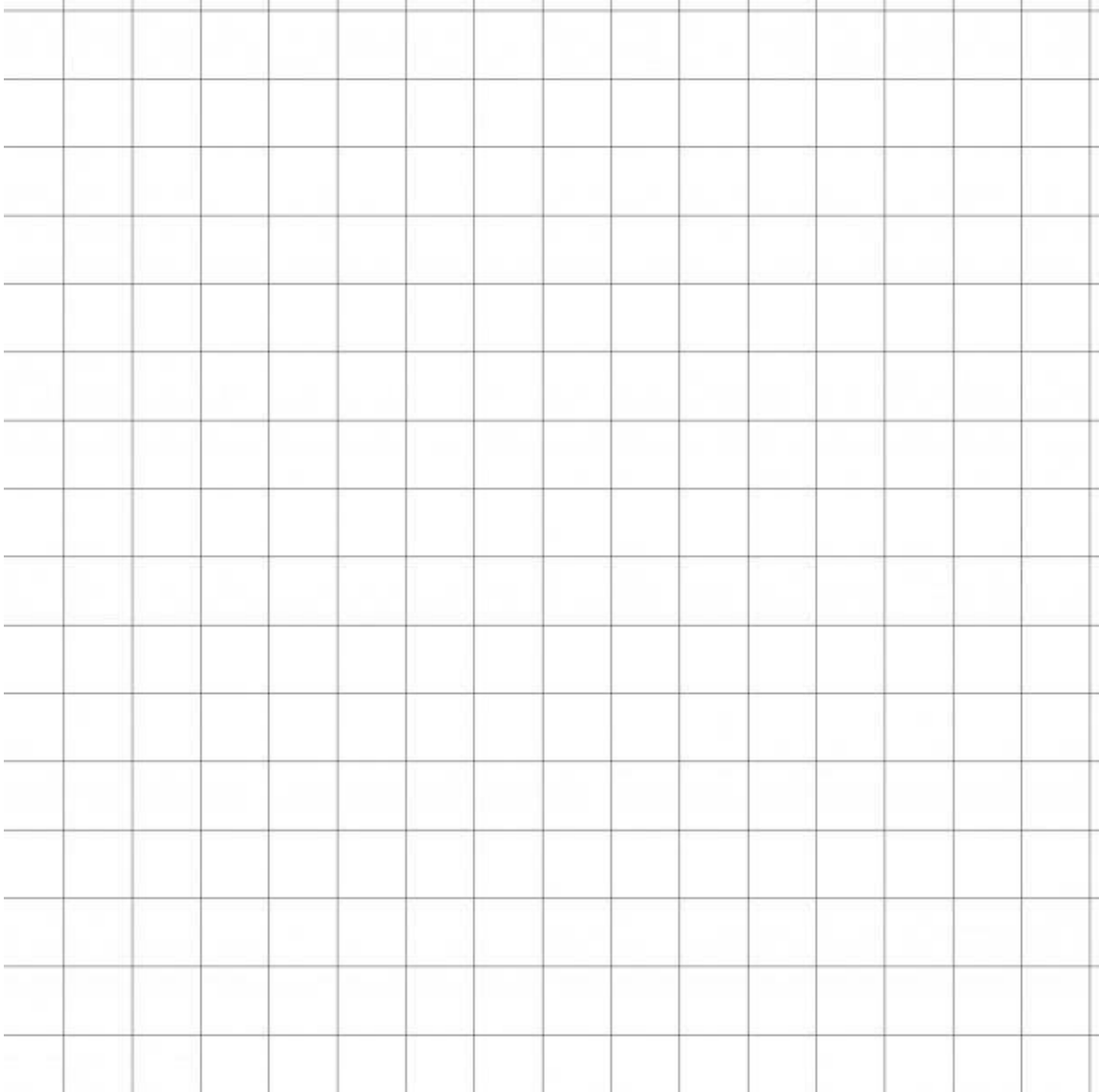
b. Area = 42 Perimeter = 26 Width = ? Length = ?

6. Find the area and the perimeter of the rectangle.

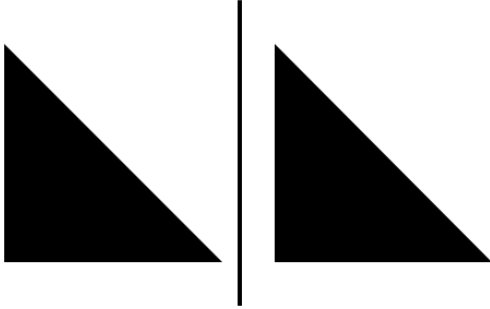




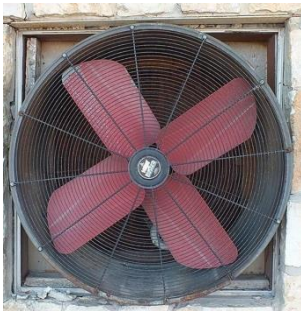
7. Draw a shape on the grid. Predict where the shape will be if it is translated 3 squares up and 5 squares right. Draw the image.



8. Is this image a reflection? Explain your reasoning.

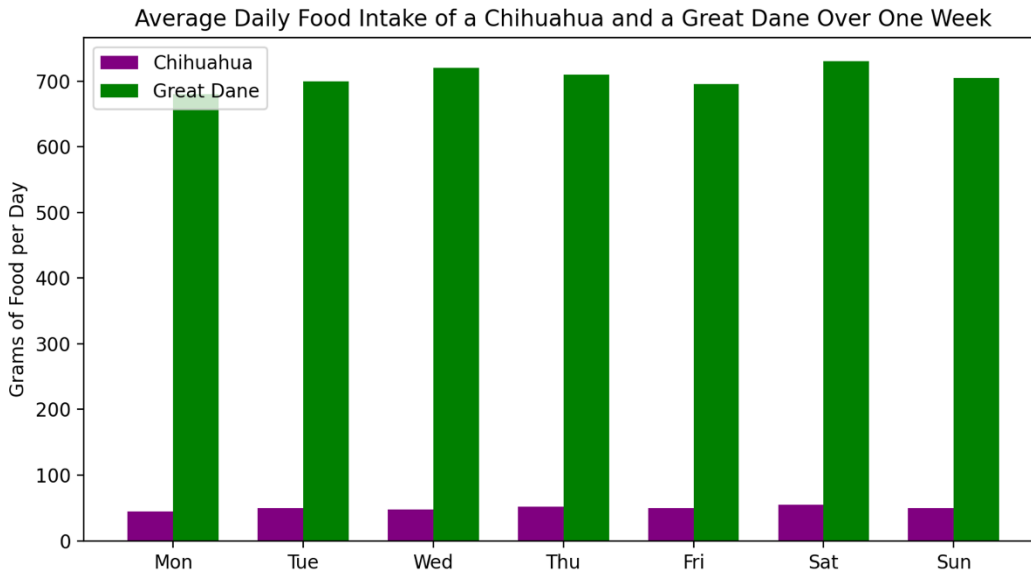


9. Label one of the fan blades 'A.' Describe the rotation to the positions of each of the other blades.



10. Draw each transformation on the grid. Start at the original each time.
- a. Translate 6 squares down and 4 squares left.
 - b. Reflect through a horizontal line.
 - c. Rotate counterclockwise 270 degrees.
 - d. Create your own transformation. Draw the image and describe the transformation.





1.
 - a. About how much food does a Great Dane eat each day?
 - b. About how much food does a Chihuahua eat each day?
 - c. How much more food does the Great Dane eat than a Chihuahua in a week?

2. Roll 2 dice 50 times each. Keep track of how many times each number is rolled for each of the dice. Create a double bar graph of your data.

NBA Total Points by Season (2020-2025)

Season	Jayson Tatum (Celtics)	Nikola Jokić (Nuggets)
2019-20	1,547	1,456
2020-21	1,692	1,898
2021-22	2,046	2,004
2022-23	2,225	1,690
2023-24	1,987	2,085
2024-25	1,932	2,071

3. Create a double bar graph using the data in the table. Include appropriate labels and decide on a scale that will work for the numbers given.

4. Explain why a double bar graph is the best kind of graph to use for the data in the table. How does your graph help you understand the data?

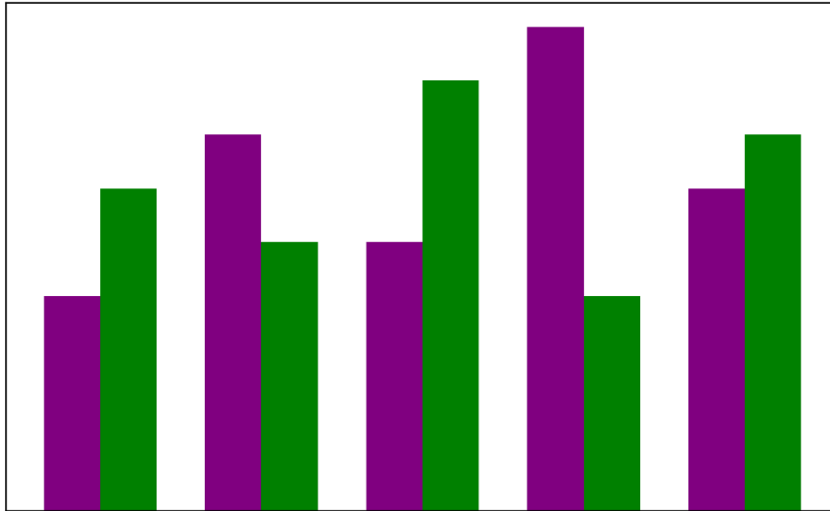


5. Analyze the graph above. List 5 things you can tell from looking at the graph.



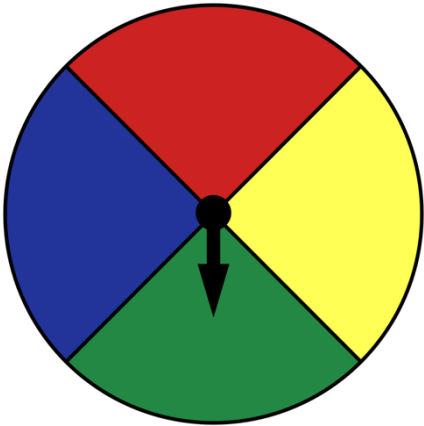
6. Create a survey question that will allow you to collect data for a double bar graph.
 - a. What makes your question a good one for this type of graph?
 - b. Collect data on the survey question you created and construct a double bar graph to show the data.

Weekly Growth of Bean Plants Compared to Sunflowers



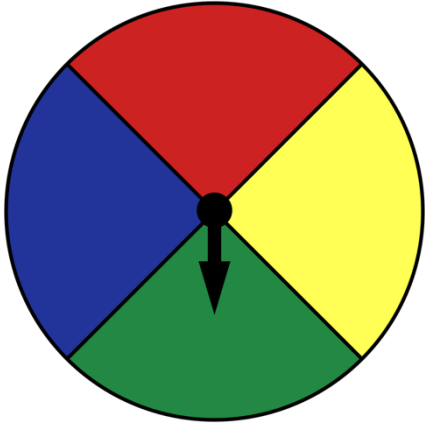
7. The graph above is missing some labels. Add a scale and a key that will help interpret the graph.

8. This spinner has an equal probability of landing on any of the four colours.
- a. Explain how we could play a game in a way that would make the spinner unfair.



- b. Create a spinner, using numbers, that has the same probability as this colour spinner.

9. Use the colour spinner below. Write each probability as a fraction.



- a. That you will land on yellow.

- b. That you will land on green or blue.

- c. That you will land on white.

- d. That you will land on red, blue or yellow.

10. This die is 12-sided with the numbers 1-12.



a. What is the probability that the number you roll will be even?

b. Write 3 other probabilities that you could apply to this die.

1. You buy a notebook for \$3.75 and pay with a \$10 bill. How much change should you receive?

2. A lunch costs \$8.60. You give the cashier \$20.
Show two different strategies to calculate the change you will receive. What is the final amount?

3. You buy:

- a book for \$12.95
- a pencil case for \$7.40
- a snack for \$3.65

What is the total cost of your items?

How much change will you receive if you pay with a \$50 bill



4. You have \$25 to spend at a school book fair. What are two different combinations of items you could buy that use all or almost all of your money? Explain how you know your total is close to \$25.

5. A jacket costs \$68.45. You pay with a \$100 bill. How much change should you receive?

6. You want to save \$120 to buy a new pair of shoes. Create a simple savings plan that shows how you could reach your goal.



7. You earn \$40 per week doing chores. Your weekly expenses are:

- Snacks: \$12
- Bus fare: \$8
- Entertainment: \$10

How much money do you have left at the end of the week?

8. You earn \$60 per week. Your expenses are:

- Phone plan: \$25
- Snacks: \$18
- Entertainment: \$22

Your expenses are greater than your income.

Create two different ways you could adjust your budget so it balances or allows you to save some money.

9. A bicycle costs \$480. You already have \$165 saved. You plan to save \$35 per week. How many weeks will it take you to save enough money to buy the bicycle?

10. You receive \$250 as a gift. How could you split the money between:

- spending
- saving
- donating

Explain your choices and show that your amounts add up to \$250.

1. Jan has \$100 of birthday money to spend. They are saving for a new pair of basketball shoes, so \$35 goes into the bank. Jan then spends \$14.69 on a movie ticket and \$10.50 on popcorn. After the movie Jan sees a jersey for their favourite sports team on sale for \$45.50

a. Does Jan have enough to buy the jersey?

b. If so, what would they receive in change?

c. How would you divide up the money if you were Jan?

2. Angie is practicing for her computation exam. She solves each of the problems below and says that they all have the same answer. Is she correct? Show how you know.

$356 + 12 =$	$736 - 368 =$
$16 \times 23 =$	$736 \div 3 =$



3. Estimate and then calculate the answers.

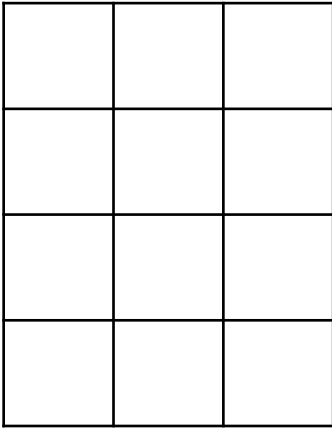
$55.75 + 21.02 =$

$8.68 - 7.07 =$

$32.09 + 193.45 =$

$12.2 - 6.59 =$

4. The dimensions of each square is 2 cm by 2 cm.



a. What is the area and perimeter of the rectangle?

b. How many rectangles would you need to make a quilt with 96 squares?

c. What would the area of the quilt be?

5. Mande's Guide group is selling cookies for a fundraiser. Each member must sell 100 boxes. The table shows how much of their sales each person has completed so far.

Mandee	0.65
Amelia	$\frac{3}{4}$
Terrice	$\frac{15}{25}$
Aria	0.25
Iris	0.1
Andy	$\frac{20}{100}$

- a. Order the sales numbers from least to greatest.
- b. How many boxes of cookies has each guide sold?

6. Mila is making designs with pebbles on the beach. She starts with 15 pebbles in the first design. She makes 5 designs. Each one has 15 more pebbles than the one before.

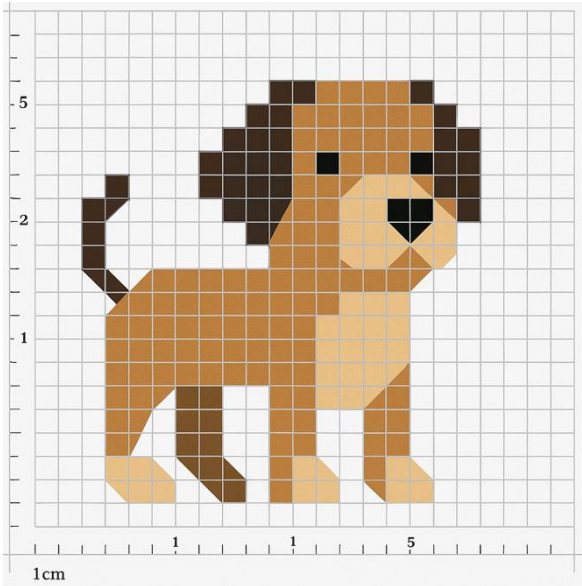
a. Draw a picture of Mila's designs

a. Write a pattern rule to describe the pattern that she has created.

b. How could you figure out how many pebbles Mila used without counting? Show 2 different ways



7.



a. Write 3 fractions that can be seen in the image.

b. Write an equivalent fraction for each.

c. Write each fraction as a decimal.

8. Kendal needs to save up money to buy a birthday present for her friend. She has \$10 in her piggy bank and needs \$34.49.

a. How much more money does Kendal need to save?

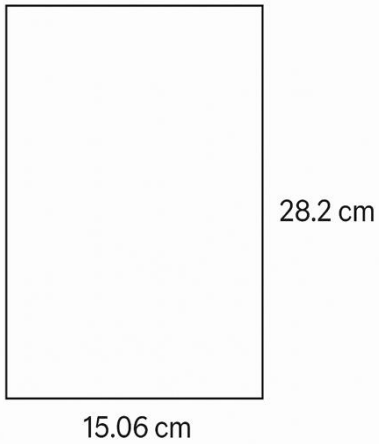
a. If she saves \$5 per week, how many weeks will she need to save in order to have enough money?

b. Draw a picture to show the pattern.

c. Write an expression that represents the pattern.



9.



a. Calculate the perimeter of the rectangle.

b. Estimate the area and explain how you estimated.

10. Sam and Tricia want to organize their Lego collection and are sorting the pieces by colour. They have 1000 pieces of Lego. 250 of the pieces are red, 150 are blue, 500 pieces are white and the rest are yellow.

a. Write a fraction for each of the 4 colours.

b. Write the smallest equivalent fraction you can for each fraction from part a.

c. Order the fractions on a number line.