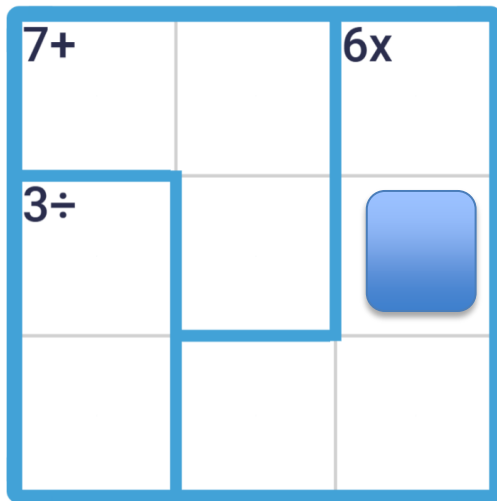


Backup Paper:


Math-Doku:

Fill the grid with the numbers from 1 to n , where n is the total number of rows or columns, such that each number appears only once in each row and column. ***Find the value of the Blue Shaded region.*** The Math-Doku grid is also divided in outlined regions called cages each with a given operator and target number. The numbers in the individual cells of a cage must produce that target number using the operator in a mathematical calculation.




1.


- A.1
- B.2
- C.3
- D.4

| | | |
|---|----|---|
| 1- | 6+ | 1 |
|  | | |
| 2÷ | | 3 |


- 2.
- A. 2
 - B. 1
 - C. 4
 - D. 3

| | | |
|----|----|---|
| 3÷ | | 2x |
| 1- | | |
| 1 | 1- |  |

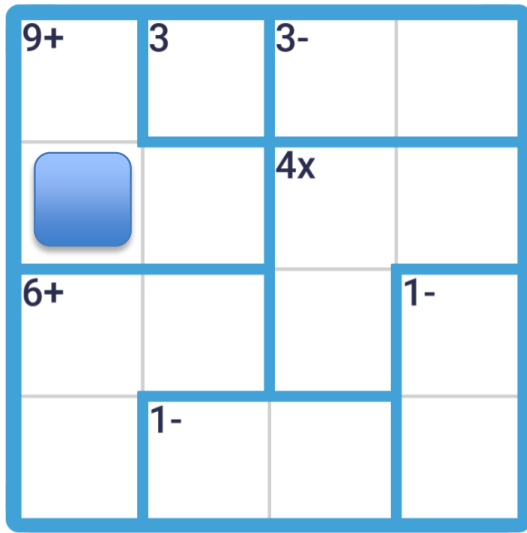
- 3.
- A. 2
 - B. 1
 - C. 4
 - D. 3

| | | |
|------|--|--|
| $6+$ | |  |
| $4x$ | | $3\div$ |
| 3 | | |

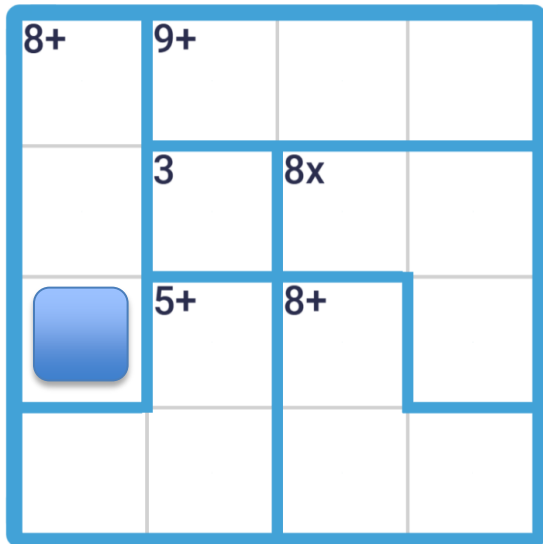
- 4.
- A. 2
 - B. 1
 - C. 4
 - D. 3

| | | |
|---------|------|---|
| $5+$ | | $2x$ |
| $3\div$ | | |
| | $1-$ |  |

- 5.
- A. 2
 - B. 3
 - C. 4
 - D. 1



- 6.
- A. 1
 - B. 2
 - C. 4
 - D. 3



- 7.
- A. 2
 - B. 1
 - C. 4
 - D. 3

Maths Nature:

1. Which pattern is often observed in the spots of a cheetah?
 - A) Polka dots
 - B) Wavy lines
 - C) Geometric shapes
 - D) Stripes

2. What symmetry is seen in a perfectly round ball?
 - A) Bilateral symmetry
 - B) Radial symmetry
 - C) Asymmetry
 - D) Reflective symmetry

3. How do the leaves of a maple tree demonstrate symmetry?
 - A) They have irregular shapes.
 - B) They are arranged randomly on branches.
 - C) They are symmetrically arranged along the stem.
 - D) They form geometric shapes.

4. Which animal exhibits symmetry in its body shape, allowing it to move gracefully in water?
 - A) Dolphin
 - B) Elephant
 - C) Snake
 - D) Crocodile

5. How do the spots on a leopard demonstrate patterns in nature?
 - A) By forming concentric circles
 - B) By creating a checkerboard pattern
 - C) By arranging themselves in rows
 - D) By displaying irregular shapes

6. What pattern is commonly found in the skin of a giraffe?
 - A) Squiggly lines
 - B) Hexagons
 - C) Scales
 - D) Spots

7. Which of the following flowers often display radial symmetry?
- A) Tulip
 - B) Daisy
 - C) Rose
 - D) Orchid

Common Core Math Relay Race:

1. Jane jogs 6 times per week. Fred jogs 4 times per week. Both Jane and Fred jog 3 miles each time. How many miles do Jane and Fred jog in a week in total?
A.32
B.25
C.30
D.28
2. Which best describes the following pattern of numbers: 2, 6, 18, 54, 162, ...
A. Each number is 6 more than the previous number.
B. Each number is 3 more than the previous number.
C. Each number is 6 times the previous number.
D. Each number is 3 times the previous number.
3. Felix's office has an area of 80 square feet. The width of his office is 8 feet. What is the length of his office? (Consider it is rectangular)
A. 20
B. 12
C. 10
D. 18
4. The value of digit 6 in the number 21,683 is 10 times greater than the value of the digit 6 in which of the following numbers?
A. 36,783
B. 572,964
C. 162,274
D. 47,618
5. Solve the equation below.

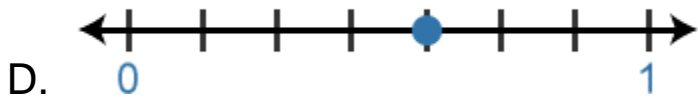
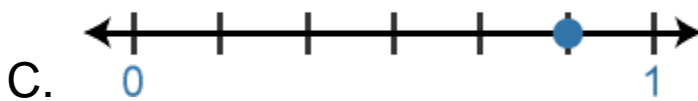
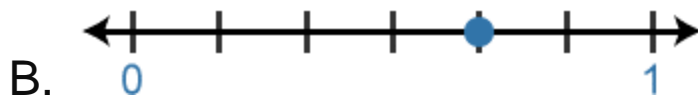
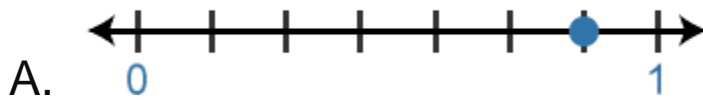
$7 \times 21 = \underline{\hspace{2cm}}$

- A. 96
- B. 147
- C. 174
- D. 127

6. Ms. Jackson's class is having a read-a-thon. One of her students, Lindsey, read 20 pages of her book each hour for 3 hours. Another student, Leon, read 40 pages of his book each hour for 3 hours. What is the difference in the number of pages Lindsey and Leon have read so far?

- A. 50
- B. 20
- C. 60
- D. 30

7. Which of the following number lines shows a point at $\frac{4}{7}$?



8. Which expression is equal to $\frac{95}{100}$?

- A. $\frac{9}{10} + \frac{5}{100}$
- B. $\frac{8}{5} + \frac{9}{100}$
- C. $\frac{50}{10} + \frac{4}{100}$
- D. $\frac{8}{10} + \frac{6}{100}$

9. There were different beverages served at a party. There was $1\frac{7}{12}$ gallons more of fruit punch served than orange juice served. Find the amount of fruit punch served.

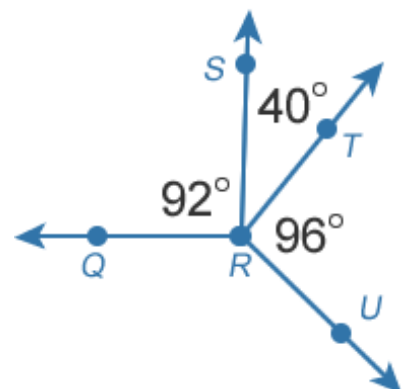
- A. $2\frac{2}{12}$
- B. $2\frac{5}{12}$
- C. $2\frac{7}{12}$
- D. $3\frac{3}{12}$

| Beverage | Amount (gal) |
|--------------|-----------------|
| Orange Juice | $\frac{10}{12}$ |
| Ice Tea | $2\frac{6}{12}$ |
| Lemonade | $1\frac{8}{12}$ |
| Fruit Punch | ? |

10. Enter the measure of angle QRT .

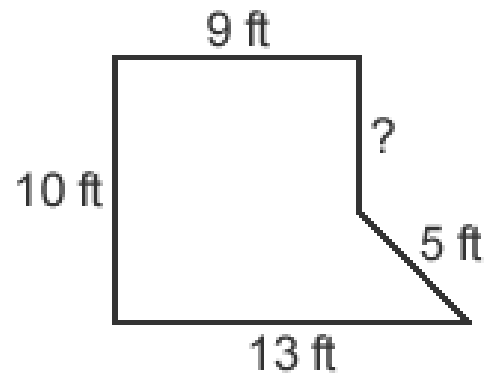
- A. 188°
- B. 132°
- C. 136°
- D. 228°

$$\begin{aligned}\angle QRS &= 92^\circ \\ \angle SRT &= 40^\circ \\ \angle TRU &= 96^\circ\end{aligned}$$

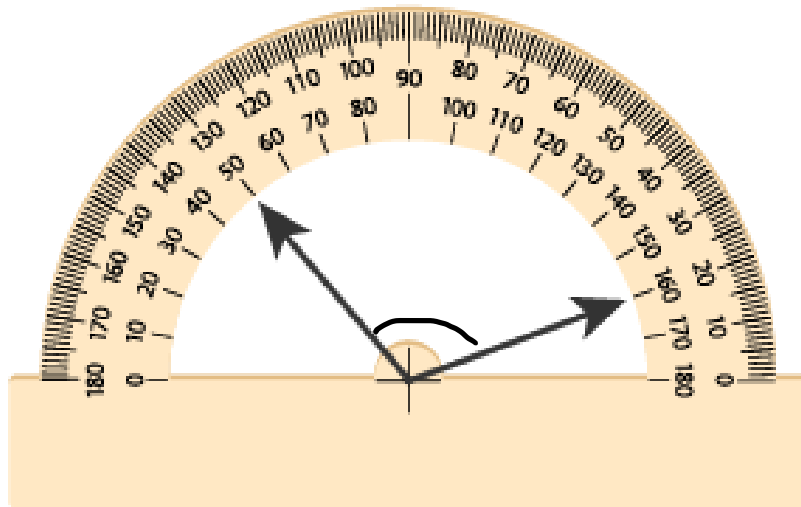


11. The shape below has a perimeter of 42 feet.
What is the length of the unknown side?

- A. 6 ft
- B. 5 ft
- C. 7 ft
- D. 10 ft

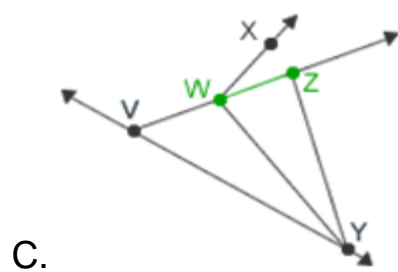
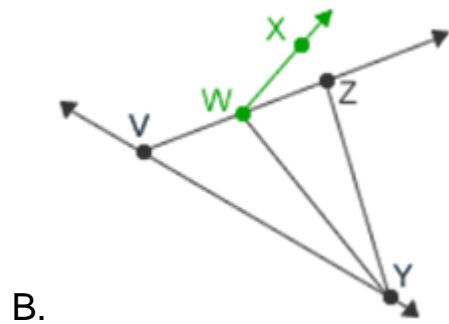
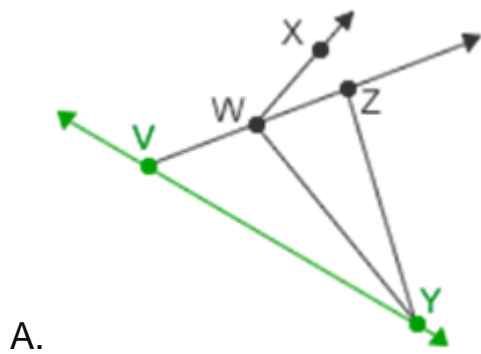


12. What is the measure of the angle above?



- A. 210°
- B. 120°
- C. 180°
- D. 110°

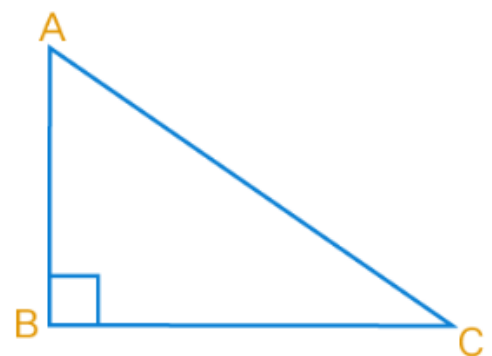
13. Select the figure below that shows a green line.



D. None Of The Above.

14. Which of the following terms classifies the triangle by its angles?

- A. acute triangle
- B. right triangle
- C. obtuse triangle
- D. None of these



15. Evvie wants to draw a shape that is a kite, but not a rhombus. Which of the following properties should her shape have?

- A. 4 equal sides
- B. 2 pairs of equal adjacent sides that are not the same length
- C. 4 square corners
- D. 2 pairs of equal opposite sides that are not the same length

Answers:

Math-Doku:

1.

| | | |
|--------------------|---|--------------------|
| ⁷⁺ 2 | 3 | ^{6x} 1 |
| ^{3÷} 1 | 2 | 3 |
| 3 | 1 | 2 |

2.

| | | |
|--------------------|--------------------|-------------------|
| ¹⁻ 2 | ⁶⁺ 3 | ¹ 1 |
| 3 | 1 | 2 |
| ^{2÷} 1 | 2 | ³ 3 |

3.

| | | |
|--------------------|--------------------|--------------------|
| ^{3÷} 3 | 1 | ^{2x} 2 |
| ¹⁻ 2 | 3 | 1 |
| ¹ 1 | ¹⁻ 2 | 3 |

| | | |
|-----------|---|--------------|
| $6+$ 1 | 3 | 2 |
| $4x$ 2 | 1 | $3\div$ 3 |
| 3 3 | 2 | 1 |

4.

| | | |
|--------------|-----------|-----------|
| $5+$ 2 | 3 | $2x$ 1 |
| $3\div$ 3 | 1 | 2 |
| 1 | $1-$ 2 | 3 |

5.

| | | | |
|-----------|-----------|-----------|-----------|
| $9+$ 2 | 3 3 | $3-$ 4 | 1 |
| 3 | 4 | $4x$ 1 | 2 |
| $6+$ 4 | 1 | 2 | $1-$ 3 |
| 1 | $1-$ 2 | 3 | 4 |

6.

| | | | |
|--------------------|--------------------|--------------------|---|
| ⁸⁺ 1 | ⁹⁺ 4 | 3 | 2 |
| 4 | ³ 3 | ^{8x} 2 | 1 |
| 3 | ⁵⁺ 2 | ⁸⁺ 1 | 4 |
| 2 | 1 | 4 | 3 |

7.

Maths Nature:

1. **Answer:** D) Stripes

The spots on a cheetah often form a pattern of elongated, tear-shaped spots, resembling stripes more than other options.

2. **Answer:** B) Radial symmetry

A perfectly round ball exhibits radial symmetry, with features radiating from its centre in all directions.

3. **Answer:** C) They are symmetrically arranged along the stem.

The leaves of a maple tree demonstrate symmetry by being symmetrically arranged along the stem.

4. **Answer:** A) Dolphin

Dolphins exhibit bilateral symmetry in their body shape, allowing them to move gracefully in water.

5. **Answer:** C) By arranging themselves in rows.

The spots on a leopard demonstrate a pattern by being arranged in rows along its body.

6. **Answer:** D) Spots

The skin of a giraffe commonly features spots as a distinctive pattern.

7. **Answer:** B) Daisy

Daisies often display radial symmetry, where petals radiate outward from the centre of the flower.

Common Core Math Relay Race:

1. **Answer:** C) $(6+4) * 3 = 30$ miles
2. **Answer:** D)
3. **Answer:** C) $80/8 = 10$ ft
4. **Answer:** B) Place value of 6 in 21,683 is 600 which is ten times the value of place value of 6 in 572,964 is 60.
5. **Answer:** B) 147
6. **Answer:** C) $(40*3) - (20*3) = 120 - 60 = 60$ pages
7. **Answer:** D)
8. **Answer:** A) $9/10 + 5/100 = (90+5)/100=95/100$
9. **Answer:** B) $19/12+10/12 = 29/12 = 2 \frac{5}{12}$
10. **Answer:** B) $92+40=132$ degrees
11. **Answer:** B) $42\text{ft} - 10\text{ft} - 9\text{ft} - 5\text{ft} - 13\text{ft} = 5\text{ft}$
12. **Answer:** D) $160-50 = 110$ degrees
13. **Answer:** A) Because a line goes in both directions indefinitely.
14. **Answer:** B) Right Triangle
15. **Answer:** B) 2 pairs of equal adjacent sides that are not the same length.