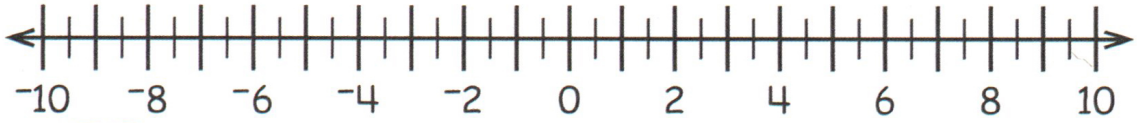
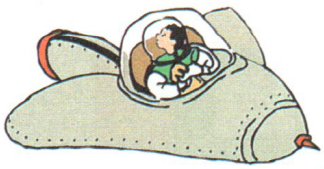
Race Across Space

Subtract the numbers to help the astronaut reach the distant planet.





$^{-}5 - {}^{+}2 =$ _____

$^{-}10 - {}^{-}6 =$ _____

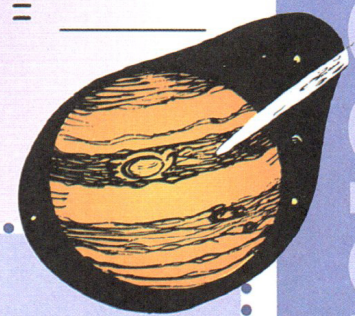
$^{-}2 - {}^{-}3 =$ _____

$^{-}7 - {}^{+}3 =$ _____

$^{-}2 - {}^{+}4 =$ _____

$^{+}2 - {}^{-}7 =$ _____

$^{-}8 - {}^{-}7 =$ _____



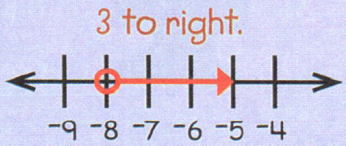
Remember:

- When you subtract a negative number, you move to the right on a number line.

  $^{-}8 - {}^{-}3 = ?$

  Start at $^{-}8$ on the number line and move 3 to the right.

  The answer is $^{-}5$.

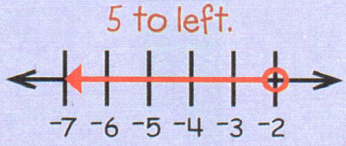


- When you subtract a positive number, you move to the left on the number line.

  $^{-}2 - {}^{+}5 = ?$

  Start at $^{-}2$ on the number line and move 5 to the left.

  The answer is $^{-}7$.



Skills:

Subtracting Negative Numbers

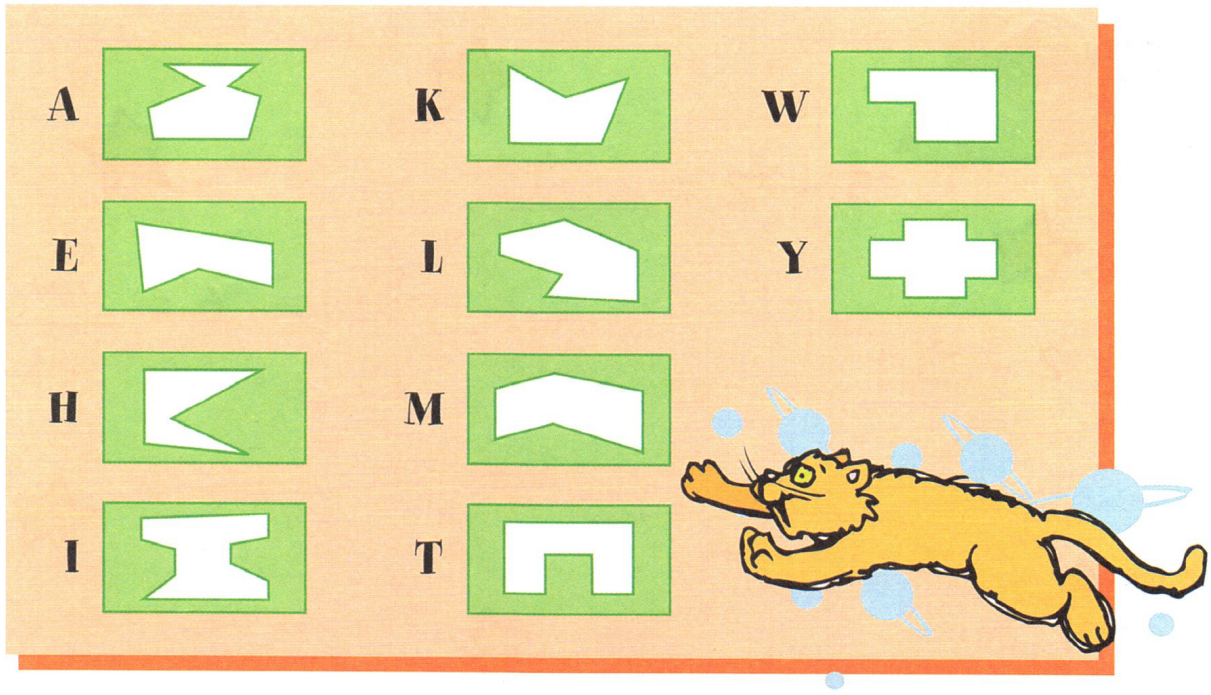
Outer Space

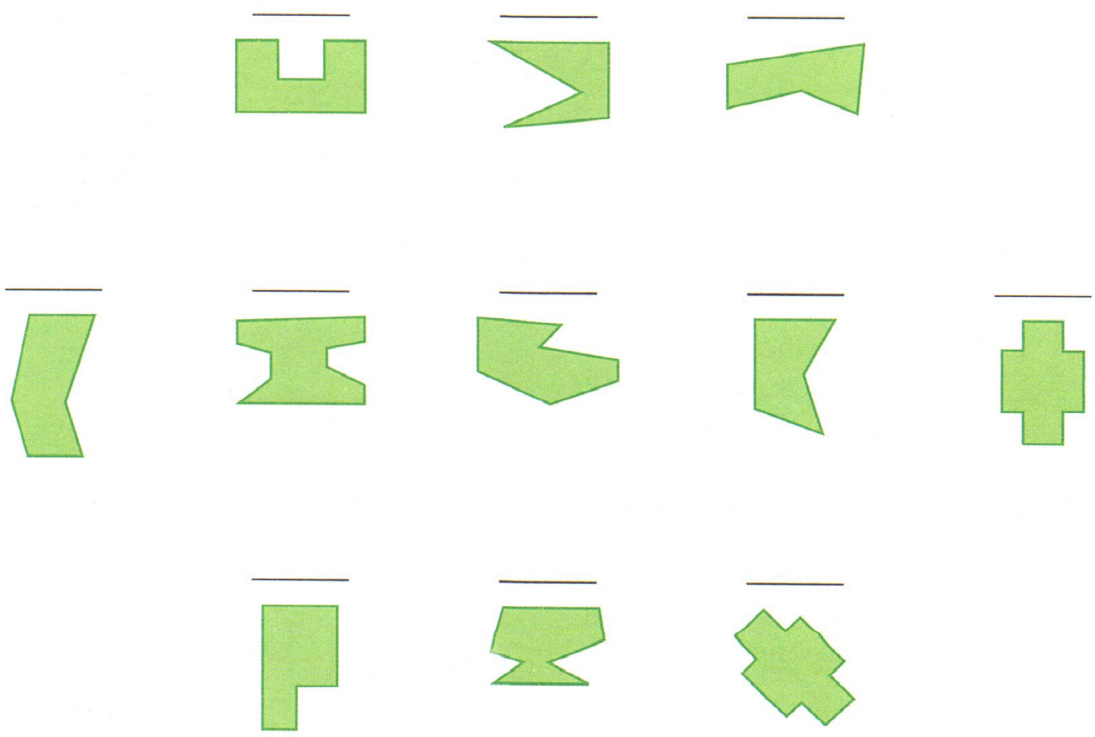
What's a Cat's Favorite Part of Outer Space?

Skills:

Identifying Congruent Shapes

Look at each figure in the box. Find the shape at the bottom of the page that is congruent (same shape and size) to the white region. Write the corresponding letter on the line above the congruent shape. The letters will spell out the solution to the riddle.



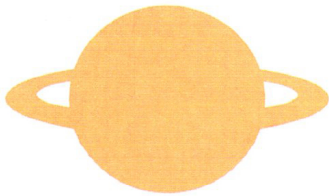


Outer Space

Transform Me

Sketch what each figure will be after the given transformations.

1. Translate to the right.



2. Rotate to the left 90 degrees.

3. Reflect across the dashed line.

4. Translate to the right.

5. Reflect across the dashed line.

Remember:

If you need help with this task, read page 49.

It's in the Bag

Skills:

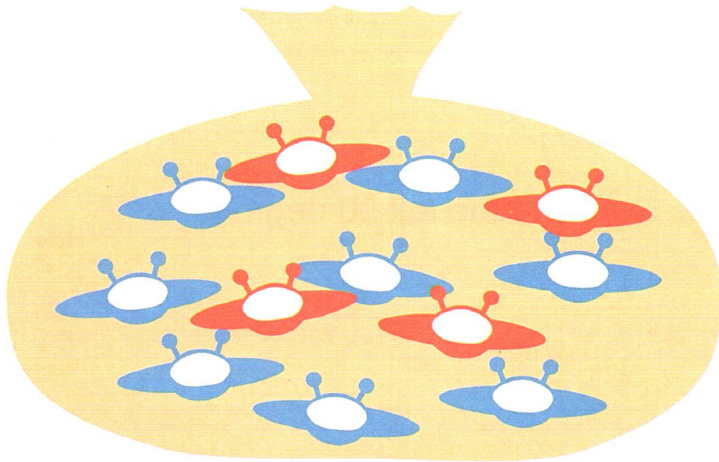
Computing Theoretical Probabilities for Simple Chance Events

Jason and Maria were playing the probability game with toy spaceships. Jake put 4 red spaceships and 8 blue spaceships in a bag. What is the probability of Maria randomly selecting a spaceship that is...?

1. red $\frac{4}{12} = \frac{1}{3}$

2. blue _____

3. gold _____

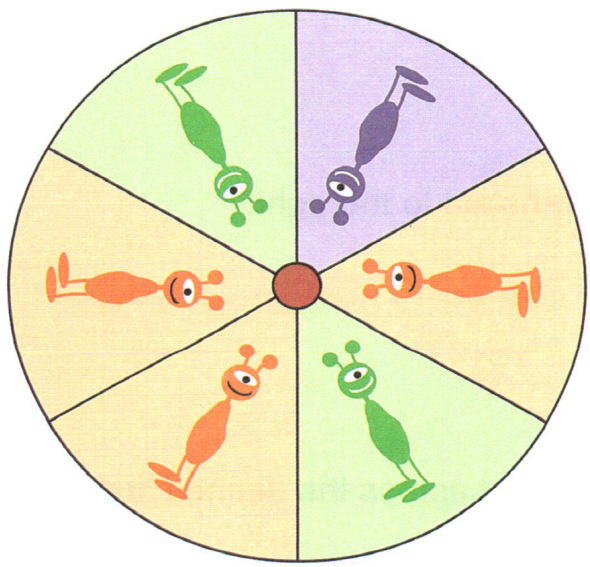


Next, they took turns spinning this spinner, what is the probability of getting...?

4. green _____

5. purple _____

6. orange _____



Remember:

Probability tells the likelihood something will happen. It is usually written as a fraction.

1 red spaceship, 1 blue spaceship in a bag

The probability is one in two chances ($\frac{1}{2}$) that you will draw either color spaceship from the bag.

Outer Space

Note: Use this assessment after your child has completed through page 126.

TEST YOUR SKILLS

Fill in the circle next to the correct answer.

1. 4^3 = _____

Ⓐ 16 Ⓒ 72

Ⓑ 64 Ⓓ 20

2. 8^2 = _____

Ⓐ 10 Ⓒ 16

Ⓑ 512 Ⓓ 64

3. 3^4 = _____

Ⓐ 9 Ⓒ 27

Ⓑ 18 Ⓓ 81

4. 0.096 ÷ 1.2 = _____

Ⓐ 80.0 Ⓒ 0.8

Ⓑ 8.0 Ⓓ 0.08

5. 4.68 ÷ 5.2 = _____

Ⓐ 9.0 Ⓒ 0.09

Ⓑ 0.9 Ⓓ 0.0009

6. Round 345 to the nearest hundred.

Ⓐ 400 Ⓒ 350

Ⓑ 300 Ⓓ 455

7. Round 56,205 to the nearest thousand.

Ⓐ 57,000 Ⓒ 56,200

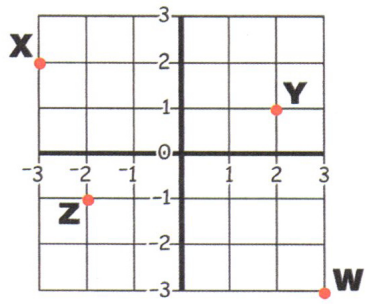
Ⓑ 56,000 Ⓓ 57,200

8. Round 175,832 to the nearest ten thousand.

Ⓐ 100,000 Ⓒ 180,000

Ⓑ 170,000 Ⓓ 176,000

For numbers 9 through 12, use this graph.



9. What is the ordered pair for point **W**?

Ⓐ (3, 3) Ⓒ (−3, 3)

Ⓑ (3, −3) Ⓓ (−3, −3)

10. What is the ordered pair for point **X**?

Ⓐ (3, 2) Ⓒ (−3, 2)

Ⓑ (3, −2) Ⓓ (−3, −2)

11. What is the ordered pair for point **Y**?

Ⓐ (2, 1) Ⓒ (−2, 1)

Ⓑ (2, −1) Ⓓ (−2, −1)

12. What is the ordered pair for point **Z**?

Ⓐ (2, 1) Ⓒ (−2, 1)

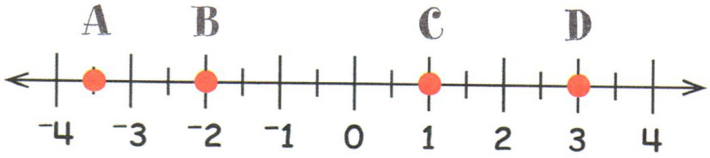
Ⓑ (2, −1) Ⓓ (−2, −1)

Note: Use this assessment after your child has completed through page 126.

TEST YOUR SKILLS

Fill in the circle next to the correct answer.

Use this number line for numbers 1 through 4.



1. Which point is located at −2?

Ⓐ point **A** Ⓒ point **C**
Ⓑ point **B** Ⓓ point **D**

2. Which point is located at 3?

Ⓐ point **A** Ⓒ point **C**
Ⓑ point **B** Ⓓ point **D**

3. Which point is located at 1?

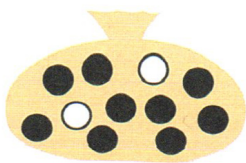
Ⓐ point **A** Ⓒ point **C**
Ⓑ point **B** Ⓓ point **D**

4. Which point is located at −3.5?

Ⓐ point **A** Ⓒ point **C**
Ⓑ point **B** Ⓓ point **D**

5. Draw a number line and number it from −3 to +3, with 0 right in the middle. Write an **S** on the value of −1 and a **W** on the value of 2.

For numbers 6 and 7, use this bag of marbles.



6. What is the probability of drawing a white marble at random from the bag?

Ⓐ $\frac{1}{2}$ Ⓑ $\frac{1}{3}$ Ⓒ $\frac{2}{11}$ Ⓓ $\frac{2}{9}$

7. What is the probability of drawing a black marble at random from the bag?

Ⓐ $\frac{1}{2}$ Ⓑ $\frac{9}{11}$ Ⓒ $\frac{3}{6}$ Ⓓ $\frac{3}{4}$

For numbers 8 through 11, use the following data:

25, 27, 28, 29, 29, 30, 32, 35, 35

8. What is the mean of the data set?

Ⓐ 19 Ⓑ 30 Ⓒ 31 Ⓓ 32

9. What is the range of the data set?

Ⓐ 25 Ⓑ 10 Ⓒ 15 Ⓓ 35

10. What is the mode of the data set?

Ⓐ 29 Ⓒ both 29 and 35
Ⓑ 35 Ⓓ there is no mode

11. What is the median of the data set?

Ⓐ 29 Ⓑ 30 Ⓒ 32 Ⓓ 35

12. Plot point A at (−2, 1) and point B at (0, −2) on this graph.