

Math Challenge

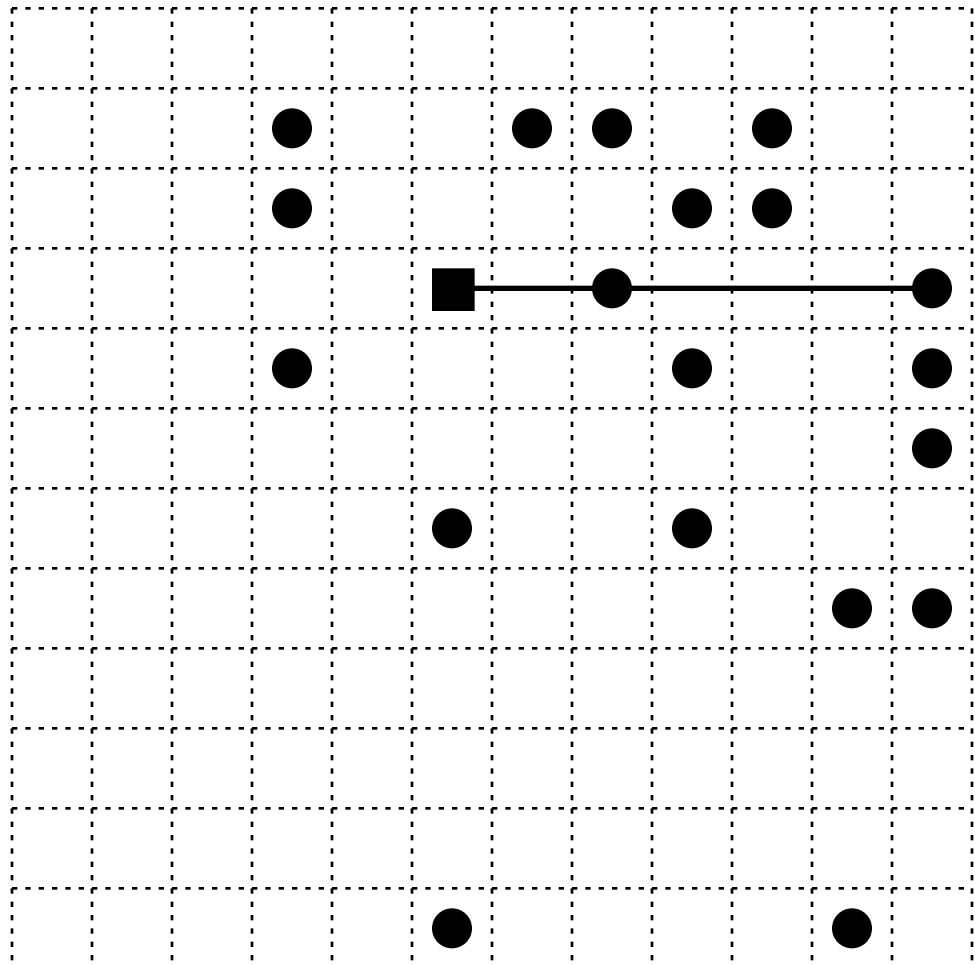


My Name: _____

Skip 1 page.

- ☐ page 1
- ☐ page 2
- ☐ page 3
- ☐ page 4
- ☐ page 5
- ☐ page 6
- ☐ page 7
- ☐ page 8
- ☐ page 9
- ☐ page 10

Start on the square. Draw exactly 12 lines without picking up your pencil to connect all the circles.



Name: _____

Batting average is the number of hits divided by the number of at bats. Brittany has a 0.28 batting average after one hundred at bats. How many hits will Brittany need in her next one hundred at bats to raise her batting average to 0.33?

On Tuesday, Jonathan played four games of bowling and averaged a score of 126. He played five more games on Saturday to bring his average over all the games played on Tuesday and Saturday to 161. What was his average score on Saturday?

Sunday's game sold eight thousand, two hundred fifty-four more than three times the number of tickets sold for the game on Monday. The total number of tickets sold for Sunday and Monday was 56,390. How many tickets were sold on Monday?

The EdHelper football team played a game against the Math Wizards. They played two halves, each of which lasted twenty-three minutes. The EdHelper team's time of possession was eight minutes more than the Math Wizard's. How long was the Math Wizard's time of possession?

☐

I did page 2

☐I decided to skip this page
edHelper

Name: _____

Get a fidget spinner! Spin it.

I needed to spin _____ time(s) to finish.

What is the area of a rectangle with sides 5 cm and 9 cm?

Round the decimal 0.345 to the nearest hundredth.

$$8 \div \frac{1}{2}$$

4, 10, 9, 23, 42,
_____, 139, 255, 468,
862, 1585, 2915, 5362,
9862

0, 2, 0, _____, 0, 2, 0,
2, 0, 2, 0, 2, 0, 2

311, 270, 232, 197, 165,
136, 110, 87, 67,
_____, 36, 25, 17, 12

$t - 8 + t = 42$
What is the value of t ?

$$0.4 (0.2 (0.4 + 9)) =$$

If $4x = 52$, then $x =$

Find the least common denominator for the fractions $\frac{25}{27}$ and $\frac{3}{6}$.

The unknown value x is a multiple of 4, is greater than 88, and it is divisible by 16. What can be the lowest possible value of x ?

If $y = 9$ and $j = -37$ then what is $12y - 11j - 3j = ?$

Name: _____

Kaylee is eight years older than Brianna, who is eight years older than Ashley. The sum of their ages is sixty-three. How old is Kaylee?

Jessica would be one-third as old as Anthony if Jessica were six years older. Anthony is twenty-nine more than two times as old as Jessica. How old is Jessica?

When Cameron is fifteen years older than he was when he was one-half his present age, he will be thirty less than three times as old as he is now. How old is Cameron?

Daniel is thirteen years older than Jasmine. Jasmine is twice as old as Caleb was five years ago. Jasmine is four years older than Caleb. How old is Jasmine?

Name: _____

Fill in the missing numbers. How? The sum of the four surrounding numbers is in the center of each square.

Exactly one of the four numbers has to be one of these numbers: $4\frac{8}{9}$, $3\frac{3}{4}$, or $5\frac{1}{4}$.

The other three numbers have to all be DIFFERENT and must be from these: $8\frac{2}{3}$, $7\frac{5}{9}$, $9\frac{1}{3}$, or $2\frac{7}{9}$.

	$4\frac{8}{9}$		$7\frac{5}{9}$		$7\frac{5}{9}$		
$2\frac{7}{9}$	$23\frac{8}{9}$	$8\frac{2}{3}$	$30\frac{29}{36}$		$30\frac{29}{36}$		$23\frac{8}{9}$
	$7\frac{5}{9}$						
	$23\frac{8}{9}$		$26\frac{1}{36}$		$26\frac{1}{36}$		$23\frac{5}{12}$
	$23\frac{8}{9}$		$24\frac{1}{4}$		$24\frac{11}{12}$		$29\frac{11}{36}$
	$26\frac{1}{36}$		$26\frac{1}{36}$		$23\frac{5}{12}$		
	$22\frac{3}{4}$		$24\frac{11}{12}$				

☐

I did page 5

☐I decided to skip this page
edHelper

Name: _____

Noah has weights totaling two hundred ten pounds that he wants to balance on a lever. He can place some of the weights 38 inches from the center and the rest 19 inches from the center. How much weight should he put on each side of the lever?

Rachel owns three houses and makes money by renting them out. She charges five times as much per month for the second house than the first. The monthly rent for the third house is one thousand, one hundred dollars less than the sum of the monthly rents for the first two houses. Three families rented from Rachel for the entire year. Rachel's total rent revenues for the year were \$73,200. How much, per month, was the rent for the second house?

Madison and her three friends earned \$11,120 last month. Taylor earned four times as much as Madison. Connor earned \$522 more than Taylor. Isaac earned two times as much as Connor. How much did Taylor earn last month?

The combined weight of Sydney and Hannah is 255 pounds. Sydney weighs three hundred fifty-seven pounds less than three times Hannah's weight. Sydney and Hannah have balanced themselves on a seesaw. If Hannah is 4 feet from the center of a seesaw, how far is Sydney from the center?

Name: _____

Twenty-nine less than 11 times a number is 92.
What is the number?

Twenty more than a number is negative
fifty-eight. What is the number?

8,000 and 3,000,000 added to two-fourths
of a number equals 3,042,916. What is the
number?

A number plus 46.76 is 106.55. What is the
number?

Name: _____

Fill in the blanks with $>$, $=$, or the $<$ sign.

$$54 \quad \underline{\hspace{1cm}} \quad -9$$

$$-87,000 \quad \underline{\hspace{1cm}} \quad 5,900,000$$

$$-20 \quad \underline{\hspace{1cm}} \quad -5$$

$$-6,000 \quad \underline{\hspace{1cm}} \quad -9,000$$

What is the least common multiple for each of the number sets?

The least common multiple of 9 and 14 is _____

The least common multiple of 7 and 13 is _____

The least common multiple of 12 and 20 is _____

The least common multiple of 10 and 14 is _____

The least common multiple of 6 and 9 is _____

Name:

	+	+	=
x	?	B	B
-	C	A	C
=	B	B	B
	119	12	20
			15
			29
			6

Equations and Hints:

Each letter is a whole number.

Fill in the equations using the chart:

$$B \times C - B = 20 \quad \underline{\hspace{1cm}} \times A - B = 12 \quad \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = 6$$

 + + = 29

Additional hints:

C = B + 9 A < 14

Show Work:

Solve:

? = _____

Name: _____

You are presented with a gold plated hula-hoop. The presenter tells you that it is worth about \$57.69 per inch of length. If the diameter of the hula-hoop is twenty-five inches, how much is it worth?

Ava is very competitive. She always makes it her goal to beat everyone else's race time by at least three percent. She had a great race this week (she won) and met her goal. If the person who came in second had a time of 1 hour and 46 minutes, what would have been the slowest time Ava could have run the race? Round your answer to the nearest minute.

The Big Town football team scored $\frac{1}{3}$ of their points on passing plays, $\frac{1}{5}$ on kicks, $\frac{1}{6}$ on turnovers, and the rest on running plays. If they scored 189 points during the season, how many points did they score on running plays?

What is the probability of choosing a heart from a standard deck of 52 randomly arranged playing cards?

For every five hundred thousand pounds of fertilizer manufactured at Bigearth, Inc., about 440 pounds are ruined by being accidentally left out in the rain. Last month, 50 pounds were ruined. Based on this information, estimate how many pounds of fertilizer were manufactured last month. Round your answer to the nearest whole number if needed.

There is a certain book at the school library that has four hundred forty pages. If the probability that you will open the book to any page at random and find a picture is 7%, how many pages in the book have pictures on them? Assume that the pictures are randomly distributed throughout the book.

☐

I did page 10

☐I decided to skip this page
edHelper

Name: _____

The beach is beginning to erode near the lighthouse. The lighthouse is only seventy-three feet from the water now. If the beach erodes at the rate of 2.6 feet per year, how many years will it be, rounded to the nearest year, before the water reaches the lighthouse?

Robert is the starting goalie for the Littleville hockey team. He averages only 2.8 goals per game. He stops an average of 31 shots per game. Based on the average, about what percent of the shots on goal does he stop from entering the net? Round your answer to the nearest tenth of a percent.

Hannah measured the pH in a flask of acidic solution several times. She was slowly adding more acid, trying to reach a stable pH of 5.5. Every time she would add a few drops of acid, the pH would drop. A few minutes after she added drops of acid, the pH would start to rise. So she kept this up and finally read the pH seven times over a period of five minutes without adding more acid. The seven pH measurements were 5.47, 5.5, 5.41, 5.44, 5.37, 5.38, and 5.35. What is the range of her measurements?

Anne is saving for a trip to her cousin's house in another state. She figures she needs \$276 to have a comfortable trip. To earn money she mows lawns. Each mowing earns her \$15. She already has mowed three lawns. How many more lawns must she mow to get at least \$276?

If a solution of MgCl is $\frac{3}{8}$ M, what will its concentration be if it is diluted by 28%?
Express your answer as a fraction.

Clarita's sister works in an American company in Amarillo, Texas. She works thirty-nine hours every week and is paid \$14.59 per hour. She sends half of her weekly salary to Clarita to take care of their mother. How much money does Clarita's sister send home each week?

Page 1 Answers

- 1 38 hits
- 2 189
- 3 12,034 (44,356 on Sunday)
- 4 19 minutes

Page 2 Answers

Page 3 Answers

- 1 29
- 2 11
- 3 18
- 4 18

Page 5 Answers

- 1 70 pounds 38 inches away and 140 pounds 19 inches away
- 2 \$3,000 (Rents were: \$600, \$3,000, \$2,500)
- 3 \$2,248 (Madison earned \$562, Taylor earned \$2,248, Connor earned \$2,770, Isaac earned \$5,540)
- 4 6 feet (Sydney weighs 102 lbs and Hannah weighs 153 lbs)

Page 6 Answers

- 1 11
- 2 -78
- 3 69,832
- 4 59.79

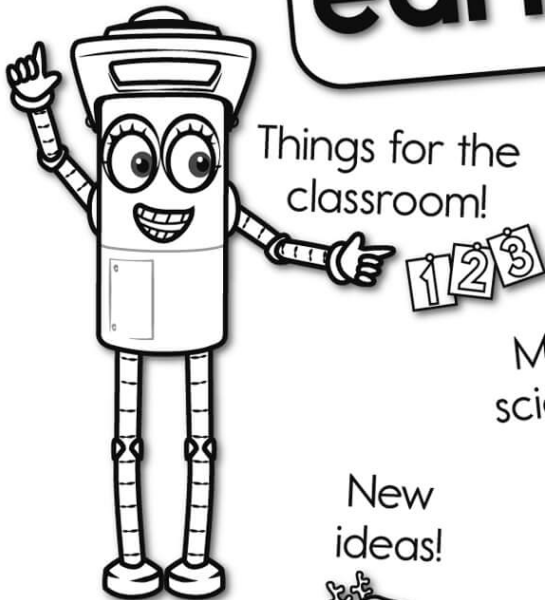


It's NO PREP
at edHelper.



edHelper.com!

**only \$19.99
per year**



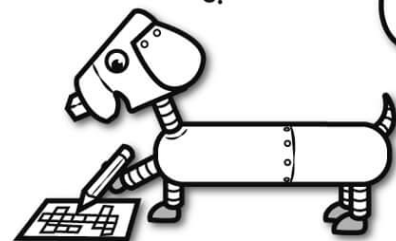
Things for the
classroom!



More
science!



More
puzzles!



More
history!

