

Math Café for Parents: Focusing on Problem Solving

Some Puzzles!

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$$\frac{\square}{\square} = \frac{\square}{\square} < \frac{\square}{\square} < \frac{1}{2}$$

Use any of the digits 1 to 9 once only to satisfy the statement above.

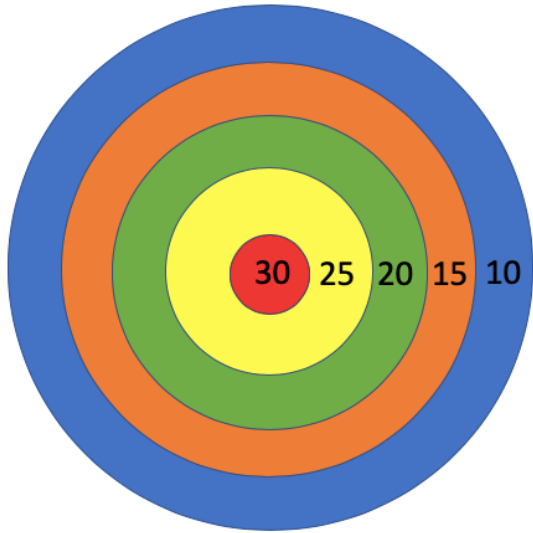
$$\text{Apple} + \text{Banana} = 60$$

$$\text{Apple} + \text{Cherries} = 82$$

$$\text{Apple} + \text{Cherry} = 50$$

$$\text{Apple} + \text{Banana} + \text{Cherry} = ?$$

Find the value of each fruit.

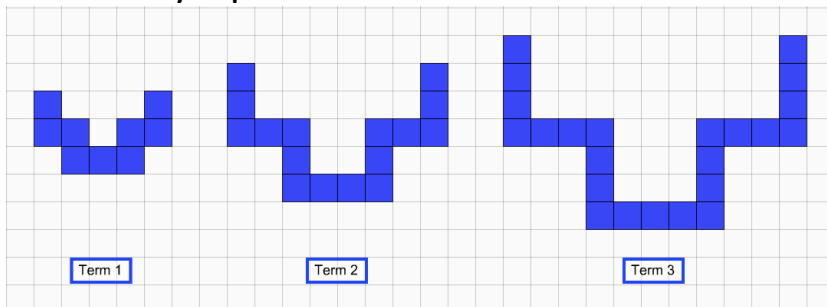


You have three darts to throw at this dartboard. How many different ways can you get a total of 70? Which total can be scored in five different ways?



A bag contains some shapes. There are more pentagons than rectangles, and there are more rectangles than triangles. In total, there are 55 sides. How many of each shape are there?

How many squares are in the hundredth term?



Some EQAO Questions Primary

- 2** Samir has these coins.



He spends \$1.75.

How much money does he have left?

- \$2.25
- \$2.50
- \$3.50
- \$4.25

- 9** The first three numbers of Danielle's and Jeff's patterns are shown. Danielle's pattern continues to increase by the same amount each time. Jeff's pattern continues to increase by the same amount each time.

Danielle's Pattern	Jeff's Pattern
76	55
80	64
84	73

Whose pattern will reach 100 first?

Junior

- 16** There are a total of 75 students in 3 classes. Each class has the same number of students.

Each student needs 2406 popsicle sticks for a science project.

How many popsicle sticks does each class need?

- 60 150
- 173 232
- 180 450
- 541 350

- 11** Packages of flags are on sale for Canada Day at two stores.

- Store A is selling a package of 5 flags for \$6.95.
- Store B is selling a package of 3 flags for \$4.80.

How much cheaper is one flag at Store A than at Store B?

Show your work.

Intermediate

- 3** It costs a company \$650 to process 52 kg of beans. The company processes 72 kg of beans in one day and 75 kg of beans the next day.

How much does it cost the company to process the beans for these two days in total?

- a \$11.76
- b \$229.93
- c \$849.00
- d \$1837.50

13 Pizza Time

A school holds a lunch fundraiser.

- The school has 350 students.
- 70% of the students order lunch.
- $\frac{1}{5}$ of the students who order lunch select sandwiches.
- The rest of the students who order lunch select pizza.

Determine the number of students who order lunch and select pizza.

Show your work.

Where to Find More Problems

- See our Twitter feed @DCDSBMath for our Problems of the Week
- The CEMC at the University of Waterloo has a wealth of math contests and weekly problems.

<https://www.cemc.uwaterloo.ca/resources/potw.php>

- The Parallel site has weekly activities aimed at Grades 7, 8 and 9.

<https://parallel.org.uk/>