

Oak Grove Math Superstars

Due Dates:



Session	Last Monday of
1	September
2	October
3	November
4	January
5	February
6	March

Grade 5

Session 5 - Answers

(50 points total; 10 points deducted if late)

Problem 1 (8 points):

Grader: 2 point per correct answer; minimum of 1 point for attempting all four problems.

A. $(5 - 1) \div 1 - (9 - 1) \div 2 = \underline{0}$

C. $(7 + 9 - 4) \div (6 \div 3 \div 1) = \underline{6}$

B. $(10 + 10) \div 5 + 8 - (4 + 3) = \underline{5}$

D. $4 \times 5 \div (1 - (5 - 5) \times 4) = \underline{20}$

Problem 2 (4 points):

Grader: 4 for correct answer; 1 point if incorrect but attempted.

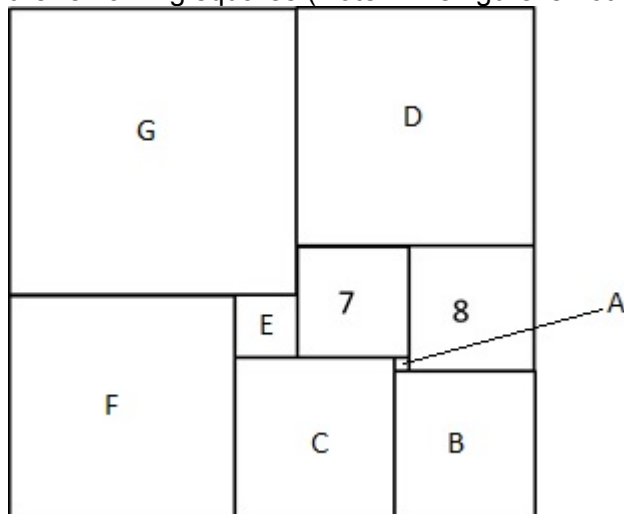
A man weighing 90 kg and his two children, each weighing 35 kg, want to cross a river. They have one boat available to cross and each one of them can row. The boat can carry at most 90 kg. What is the minimum number of crossings (i.e. going from one side of the river to the other side – not a round trip) that need to be made to get all three people from one side of the river to the other?

Answer: child&child across; child return; man across; child return; child&child across = 5

Problem 3 (21 points):

Grader: 3 points per correct answer; minimum of 1 point.

The rectangle below is divided into perfect squares, two of which have lengths of 7 and 8. Find the lengths of the remaining squares (Note: The figure is not drawn to scale).



Answer:

$$\begin{array}{rcl}
 A & = & \underline{1} \\
 B & = & \underline{9} \\
 C & = & \underline{10} \\
 D & = & \underline{15} \\
 E & = & \underline{4} \\
 F & = & \underline{14} \\
 G & = & \underline{18}
 \end{array}$$

Problem 4 (5 points):

Grader: 5 points for correct answer; 1 point if incorrect but attempted.

A regular octagon shares a side with a square, and the perimeter of the octagon is 64 cm what is the area of the square?

Answer: 64 cm²

Problem 5 (12 points):

Grader: 2 point per correct letter; minimum of 2 points if attempted.

Solve the puzzle by finding the values of W, R, N, G, T and I:

(Hint: if you get stuck, try substituting remaining numbers to see if a combination works)

$$\begin{array}{r} W R O N G \\ + W R O N G \\ \hline R I G H T \end{array}$$

You are given

that:

$$O = 0 \text{ (zero)}$$

$$H = 8$$

Answer:

$$W = \underline{3}$$

$$R = \underline{7}$$

$$N = \underline{9}$$

$$G = \underline{1}$$

$$T = \underline{2}$$

$$I = \underline{4}$$