

Name \_\_\_\_\_ School Team \_\_\_\_\_

Event 1: Problem Solving (no calculators)

5th/6th grade Math Meet '08

Part 1: Computations (2 pts. each)

Answers must be completely simplified.

1)  $12 \div .375 = \boxed{\phantom{000}}$

2)  $\boxed{\phantom{000}} / 35 = 32 / 80$

3)  $\frac{(12 \times 16 \times 32)}{(64 \times 18 \times 6)} = \boxed{\phantom{000}}$

4)  $9 + (11 \times 22) = \boxed{\phantom{000}} \div 8$

5)  $3 \times (17 + \boxed{\phantom{000}}) / 8 = 12$

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Part 2: Defining a new operation (3 pts. each)

Let's define a new operation:  $\{A, B, C\} = (A + B) \times (A - B) - (A + C) \times (A - C)$

For example,  $\{1, 2, 3\} = (1 + 2) \times (1 - 2) - (1 + 3) \times (1 - 3) = -3 - (-8) = 5$

1)  $\{2, 4, 5\} =$

2)  $\{7, 8, 9\} =$

3)  $\{6, 10, 14\} =$

Circle one:

4) Does  $\{A, B, C\} = -\{A, C, B\}$  ?

yes

no

5) If  $A < B < C$ , then  $\{A, B, C\} > 0 \dots$

always

sometimes

never