

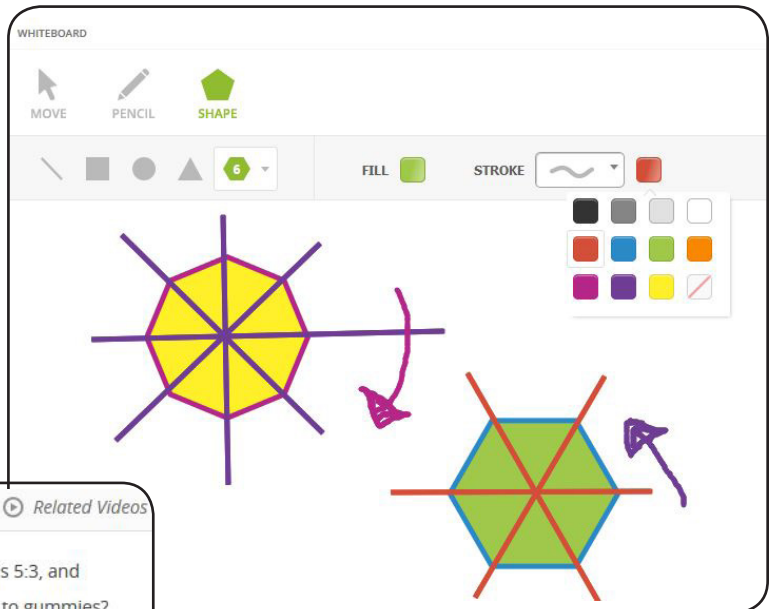
# Helpful Resources for the Math Video Challenge

## Interactive MATHCOUNTS Platform

The **Interactive MATHCOUNTS Platform** provides a unique forum where members of the MATHCOUNTS community can collaborate, chat and utilize innovative online features as they work on problems from MATHCOUNTS handbooks and competitions.

Powered by **NextThought**, the Interactive MATHCOUNTS Platform continues to grow, with more problems and features being added every year.

This resource includes problems and step-by-step solutions for all 250 math problems in the *2016-2017 MATHCOUNTS School Handbook*, as well as past handbooks and School, Chapter and State



### 7. INCORRECT

Related Videos

Mrs. Stephens has a bag of candy. The ratio of peppermints to chocolates is 5:3, and the ratio of peppermints to gummies is 3:4. What is the ratio of chocolates to gummies? Express your answer as a common fraction.

Answer:  $\frac{9}{20}$

We should use the least common multiple of 5 and 3 to make equivalent ratios with the same number of peppermints. We rewrite the ratio of peppermints to chocolates (5:3) as  $\frac{15}{9}$  and the ratio of peppermints to gummies (3:4) as  $\frac{15}{20}$ . This means that for every 15 peppermints there are 9 chocolates and 20 gummies. The desired ratio is  $\frac{9}{20}$ .

√ x² () ≈ π

Hide Solution

Try again

Competitions from multiple years.

Users can take advantage of numerous features that make this platform engaging; here are just a few:

- *Digital white-boards* enable students to highlight problems, add notes and questions and show their work.
- *Interactive problems* can be used to assess student or team performance.
- *Advanced search tools* make it easy to find

MATHCOUNTS content and notes.

- *Collaborative forums* allow users to chat and share with the global MATHCOUNTS community.

The Interactive MATHCOUNTS Platform is a great resource for your Math Video Challenge team! Create your free account at [mathcounts.nextthought.com](http://mathcounts.nextthought.com) today!

# 2016-2017 OFFLINE PERMISSION FORM



**TEAM ADVISOR:** Please give this Offline Registration Form to the parent/guardian whose name you provided during your online registration. If you need to update this information, you can log in at the Math Video Challenge website (<http://videochallenge.mathcounts.org>) and make any necessary changes online. *Do not give this form to any parents/guardians who have completed or will complete the online permission form.*

**PARENT/GUARDIAN:** As soon as possible, please complete this Offline Registration Form and email it to [videochallenge@mathcounts.org](mailto:videochallenge@mathcounts.org) or mail it to MATHCOUNTS – Math Video Challenge Registrations, 1420 King Street, Alexandria, VA 22314. *Your child cannot participate in the Math Video Challenge without your permission.*

## TEAM INFORMATION:

**!** *If your son/daughter is participating in more than one Math Video Challenge team, please write the names of all teams and team advisors on this form.*

(\*required information)

Team Advisor Name\* \_\_\_\_\_

Team Name\* \_\_\_\_\_

## STUDENT INFORMATION:

**!** *If you have more than one child participating in the Math Video Challenge this year, you must complete a separate permission form for each child.*

(\*required information)

First & Last Name\* \_\_\_\_\_ Grade Level (circle one)\* 6 7 8

Email Address \_\_\_\_\_

Name of Student's Official School of Record\* \_\_\_\_\_

School City\* \_\_\_\_\_ School State\* \_\_\_\_\_

## PARENT/GUARDIAN INFORMATION:

(\*required information)

First & Last Name\* \_\_\_\_\_ Phone Number\* \_\_\_\_\_

Email Address \_\_\_\_\_

By signing below I attest that I am the parent/guardian of the above-mentioned minor and give permission for my child to participate in the Math Video Challenge video contest. My child and I agree to be bound by the terms and conditions of participation.

*A copy of the terms and conditions of participation can be found at <http://videochallenge.mathcounts.org/rules> or can be requested by emailing [videochallenge@mathcounts.org](mailto:videochallenge@mathcounts.org) or mailing a self-addressed stamped envelope to: MATHCOUNTS – Math Video Challenge Rules, 1420 King Street, Alexandria, VA 22314. Please direct any questions to MATHCOUNTS at [videochallenge@mathcounts.org](mailto:videochallenge@mathcounts.org) or (703) 299-9006.*

\_\_\_\_\_  
Printed Name of Parent/Guardian

\_\_\_\_\_  
Signature of Parent/Guardian

\_\_\_\_\_  
Date

# SAMPLE ASSESSMENT TOOL

with point values pre-assigned



Name \_\_\_\_\_

Video Title \_\_\_\_\_

## 24 POINTS - MATHEMATICAL CONTENT

\_\_\_\_\_ (0-6 pts) An appropriate approach to the solution of the problem is used.

\_\_\_\_\_ (0-6 pts) The facts and logic are correct. There are no errors.

\_\_\_\_\_ (0-6 pts) The use of vocabulary and notation are correct.

\_\_\_\_\_ (0-6 pts) The solution is explained in a way that is clear to the viewer.

## 30 POINTS - COMMUNICATION

\_\_\_\_\_ (0-6 pts) The mathematical thinking is communicated coherently and in a logical manner.

\_\_\_\_\_ (0-6 pts) The video uses time effectively.

\_\_\_\_\_ (0-6 pts) The important ideas are emphasized.

\_\_\_\_\_ (0-6 pts) Sufficient detail is used.

\_\_\_\_\_ (0-6 pts) The method of communication (verbal/written/etc.) is clear and easy to understand.

## 24 POINTS - CREATIVITY

\_\_\_\_\_ (0-6 pts) The style of the video is well-suited for the audience/middle school students.

\_\_\_\_\_ (0-6 pts) The story line of the video is engaging.

\_\_\_\_\_ (0-6 pts) The video shows imagination by the creators.

\_\_\_\_\_ (0-6 pts) The video is memorable.

## 10 POINTS - REAL-WORLD APPLICATION OF MATH

\_\_\_\_\_ (0-10 pts) The video presents a clear, real-world application of the math concept(s) in the problem.

## 12 POINTS - VIDEO LOGISTICS

\_\_\_\_\_ (0-6 pts) The video is no more than 5 minutes in length.

\_\_\_\_\_ (0-6 pts) The video was submitted on time.

## BONUS POINTS

\_\_\_\_\_ (0-2 pts) A real-world application of the concept is shown that is not part of the original problem.

\_\_\_\_\_ (0-2 pts) The video production quality is excellent.

\_\_\_\_\_ (0-2 pts) The problem selected is a more difficult problem to solve and explain.

\_\_\_\_\_ (0-2 pts) More than one solution to the problem is shown.

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**TOTAL POINTS** (out of 100)

# BLANK ASSESSMENT TOOL

*without pre-determined point-values*



Name \_\_\_\_\_

Video Title \_\_\_\_\_

## POINTS - MATHEMATICAL CONTENT

- \_\_\_\_\_ ( pts) An appropriate approach to the solution of the problem is used.
- \_\_\_\_\_ ( pts) The facts and logic are correct. There are no errors.
- \_\_\_\_\_ ( pts) The use of vocabulary and notation are correct.
- \_\_\_\_\_ ( pts) The solution is explained in a way that is clear to the viewer.

## POINTS - COMMUNICATION

- \_\_\_\_\_ ( pts) The mathematical thinking is communicated coherently and in a logical manner.
- \_\_\_\_\_ ( pts) The video uses time effectively.
- \_\_\_\_\_ ( pts) The important ideas are emphasized.
- \_\_\_\_\_ ( pts) Sufficient detail is used.
- \_\_\_\_\_ ( pts) The method of communication (verbal/written/etc.) is clear and easy to understand.

## POINTS - CREATIVITY

- \_\_\_\_\_ ( pts) The style of the video is well-suited for the audience/middle school students.
- \_\_\_\_\_ ( pts) The story line of the video is engaging.
- \_\_\_\_\_ ( pts) The video shows imagination by the creators.
- \_\_\_\_\_ ( pts) The video is memorable.

## POINTS - REAL-WORLD APPLICATION OF MATH

- \_\_\_\_\_ ( pts) The video presents a clear, real-world application of the math concept(s) in the problem.

## POINTS - VIDEO LOGISTICS

- \_\_\_\_\_ ( pts) The video is no more than 5 minutes in length.
- \_\_\_\_\_ ( pts) The video was submitted on time.

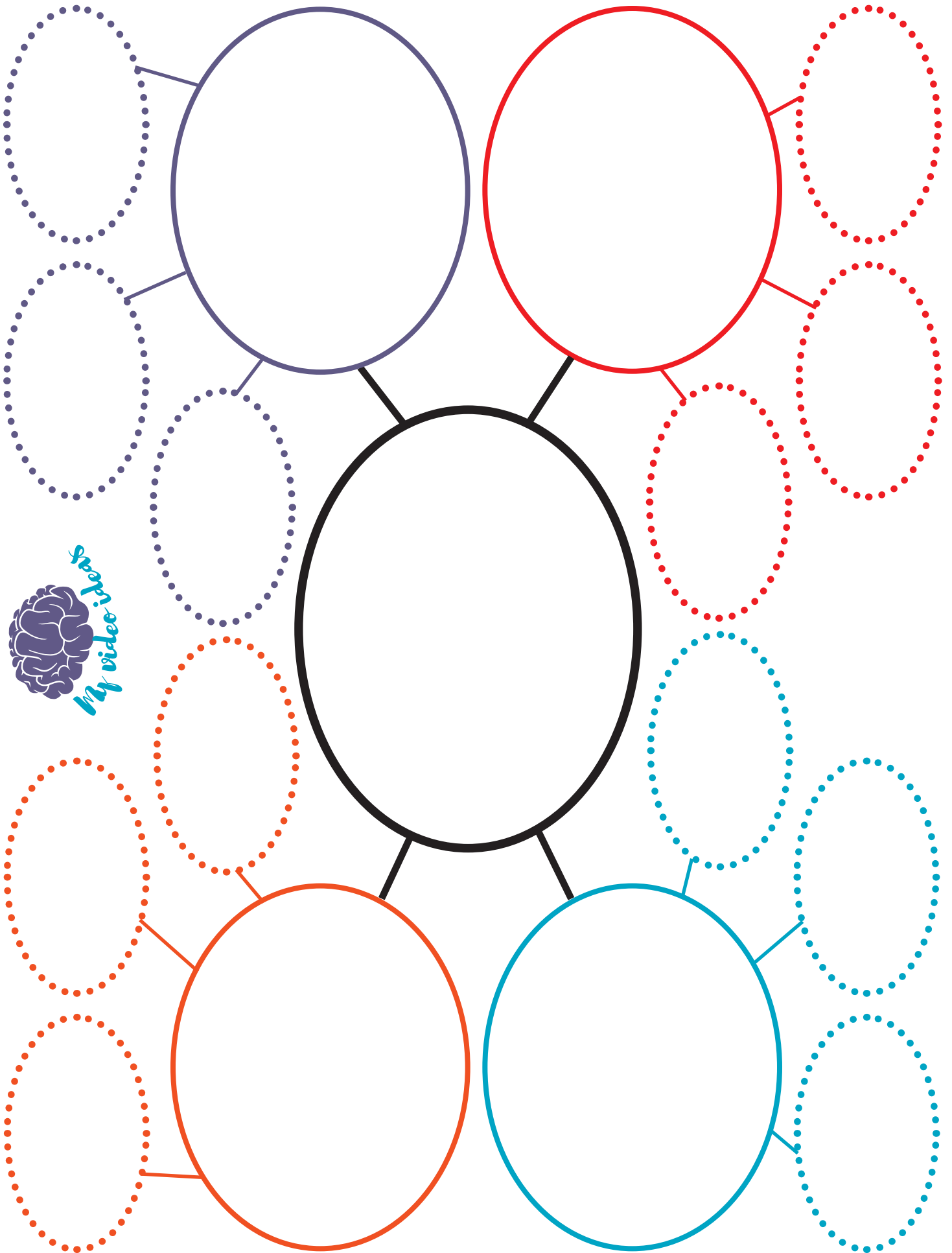
## BONUS POINTS

- \_\_\_\_\_ ( pts) A real-world application of the concept is shown that is not part of the original problem.
- \_\_\_\_\_ ( pts) The video production quality is excellent.
- \_\_\_\_\_ ( pts) The problem selected is a more difficult problem to solve and explain.
- \_\_\_\_\_ ( pts) More than one solution to the problem is shown.

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**TOTAL POINTS** (out of )





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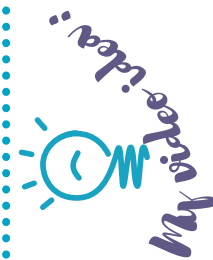
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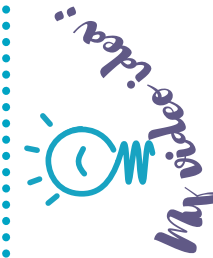
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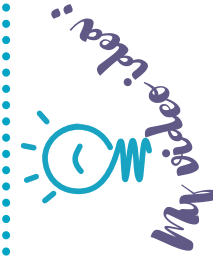
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**Details:** \_\_\_\_\_

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# STORYBOARD TEMPLATE

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