

Grade 8

Math

Homework

Test Prep

Packet #5

Student's Name

Parent's / Guardian's Signature

Test –Taking Strategies for Students

Multiple Choice Questions

- Read all directions carefully.
- Underline important words or phrases.
- Cross out answer choices you know are wrong
- Do not spend too much time on any question.
If a question is difficult, skip it and go back to it later.
- Be careful to mark each answer in the right place.
- If you want to change your answer, mark a X over the incorrect answer and then fill in the correct answer.
- Be sure to have an answer for each question.

Extended Response Items

- Read each question carefully and think about the answer before writing your response.
- Be sure to answer the question being asked.
- Be sure to write your answer on the line.
- Use pictures or diagrams to help you solve a problem.
- Use numbers and words when asked to explain your answer.
- Use your protractor or ruler if required to answer a question.
- Use your calculator to help you solve the problems.
(Grade 7 & 8 only)
- Keep your paper neat and organized.
- Be sure to show your work when asked, you may receive partial credit.

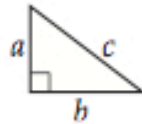


This picture means that you will use your ruler.

Mathematics Reference Sheet

FORMULAS

Pythagorean Theorem



$$c^2 = a^2 + b^2$$

Simple Interest

$$I = prt$$

Distance Formula

$$d = rt$$

CONVERSIONS

Temperature Conversions

$$F = \frac{9}{5}C + 32$$

$$C = \frac{5}{9}(F - 32)$$

Measurement Conversions

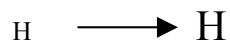
$$1 \text{ mile} = 5,280 \text{ feet}$$

$$1 \text{ yard} = 3 \text{ feet}$$

Read each question carefully and think about the answer before choosing your response.

1. What is the greatest common factor of $12y^3$ and $16y^4$?
- A $2y^3$
 - B $4y^3$
 - C $8y^7$
 - D $12y^7$

2. Which transformation is represented by the figure below?



- A rotation
 - B reflection
 - C dilation
 - D line symmetry
3. During class, Jerome was able to complete fifteen math problems from his test prep packet. He then was able to complete an average of 12 problems every hour at home. The table below shows the number of problems Jerome can complete in h hours.

Completing My Homework

Number of Hours (h)	Number of Problems (p)
0	15
1	27
2	39
3	51
4	63

Which equation can be used to determine the number of problems completed, p , after h hours?

- A $p = 15h$
- B $p = 15h + 12$
- C $p = 12h$
- D $p = 15 + 12h$

Name _____
Grade 8

Date _____
Test Prep Packet #5

**Read each question carefully and think about the answer before writing your response.
Be sure to show your work when asked.**

4. Ben wants to buy a bicycle. The regular price of the bicycle is \$140.
The sale price of the bicycle is 25% off of the regular price.

Part A

What is the sale price of the bicycle?

Show your work.

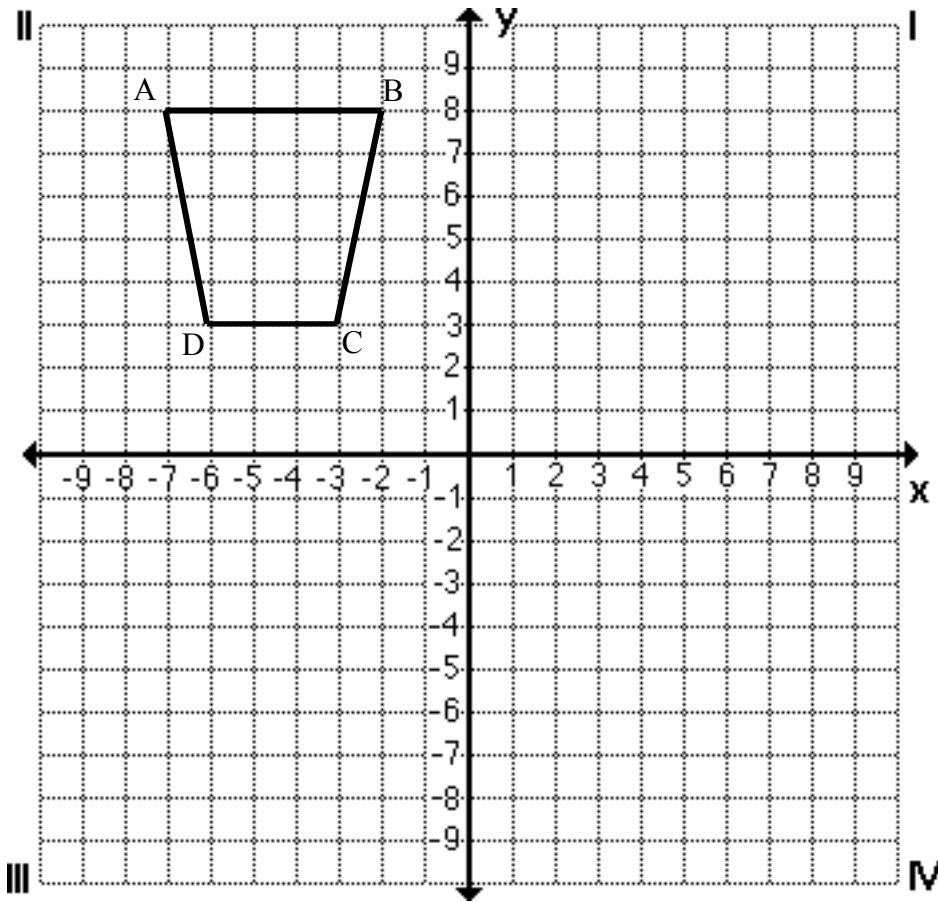
Answer \$ _____

Part B

Ben must pay 8.75% sales tax on the sale price of his bicycle. What is his total cost of the bicycle including tax?

Answer \$ _____

5. Leonard drew the shape on the grid shown below. Draw the reflection of this shape in the y-axis. Label the coordinates of each point on the new figure.



On the lines below, explain how you determined the reflection of the shape.
