

MINUTES OF THE HOUSE EDUCATION COMMITTEE

The meeting was called to order by Chairman Clay Aurand at 9:00 A.M. on March 21, 2007 in Room 313-S of the Capitol.

All members were present except:

Representative Benjamin Hodge - absent
Representative Marti Crow- excused

Committee staff present:

Sharon Wenger, Kansas Legislative Research Department
Michele Alishahi, Kansas Legislative Research Department
Ashley Holm, Kansas Legislative Research Department
Theresa Kiernan, Revisor of Statutes
Janet Henning, Committee Assistant

Conferees appearing before the committee:

Dale Dennis, Interim Commissioner, Kansas State Department of Education
Dr. Tom Foster, Kansas State Department of Education

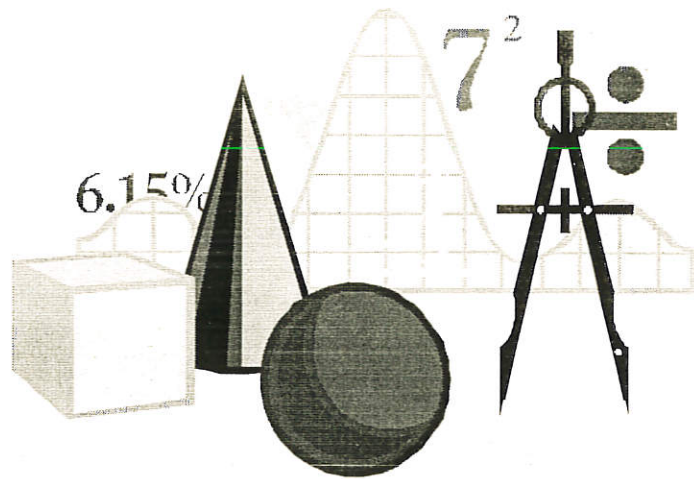
At the request of the Chairman, Dale Dennis and Dr. Tom Foster administered a sample math assessment test to Committee members which was based on Released Items from 6th Grade Kansas Mathematics Assessments. Upon completion and grading of the assessment test, a brief question and answer discussion followed. (Attachments #1 and #2)

A sample reading assessment test was then administered to Committee members which was based on Released Passage and Items from 8th Grade Kansas Reading Assessment. Upon completion and grading of the assessment test, a brief question and answer session followed. (Attachments #3 and #4)

The Chairman reminded Committee members they should be considering topics for interim and issues to be looked at for next year's session.

Sharon Wenger gave a report on the actions of the Senate Education Committee regarding bills worked by that committee.

The meeting was adjourned at 10:00 AM. The next meeting is scheduled for Thursday, March 22, 2007.



SAMPLE MATH ASSESSMENT

Based On Released Items From 6th Grade Kansas Mathematics Assessments

Read each question below and circle the correct answer.

1. Marie is buying 2 hamburgers for \$1.49 each and 2 cartons of milk for \$0.89 each. Which expression would provide the best ESTIMATE of the total amount of money that she will spend?

- A) $(2 \times 1) + (2 \times 1)$
- B) $(2 \times 1.5) + (2 \times 0.5)$
- C) $(2 \times 1.5) + (2 \times 1)$
- D) $(2 \times 2) + (2 \times 1)$

2. The numbers shown below follow a pattern.

64 128 256 512 ?

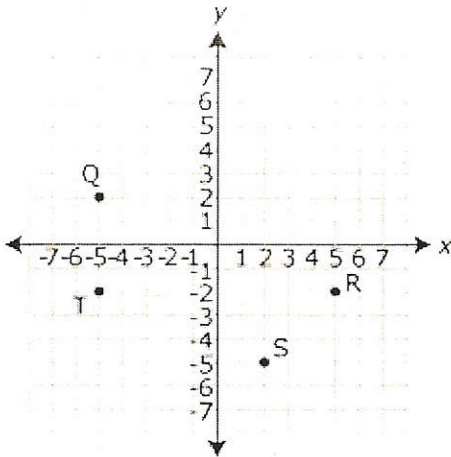
Which rule could be used to find the next number in the pattern?

- A) add 64 to the previous number
- B) add 128 to the previous number
- C) multiply the previous number by 2
- D) multiply the previous number by 4

3. In 12 kilograms there are exactly how many hectograms?

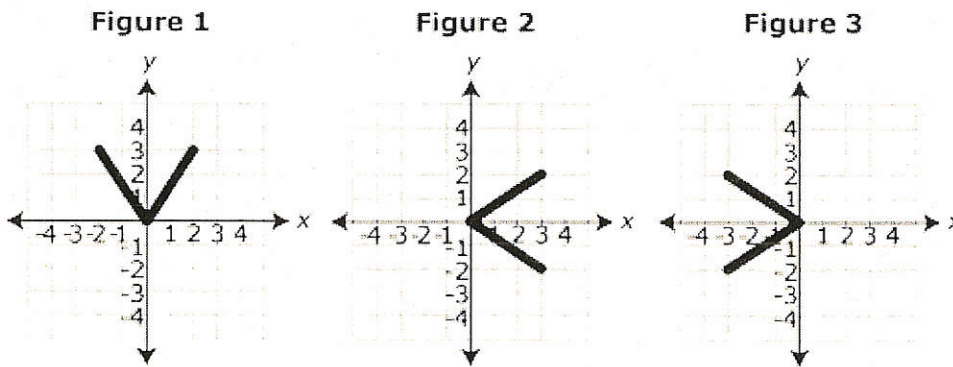
- A) 0.12 hectograms
- B) 1.2 hectograms
- C) 120 hectograms
- D) 1200 hectograms

4. Four points are shown on the coordinate plane below. Which point is located at $(-5, 2)$?



- A) point Q
- B) point R
- C) point S
- D) point T

5. The diagrams below show Figure 1 transformed two times: first to Figure 2, and then from Figure 2 to Figure 3.



Based on the diagrams, which two transformations were performed on Figure 1?

- A) first a reflection, then a rotation
- B) first a rotation, then a translation
- C) first a translation, then a reflection
- D) first a rotation, then a reflection

6. A bag contains 10 marbles. There are 3 yellow marbles, 2 red marbles, and 5 green marbles in the bag. What is the probability of randomly selecting a red marble from the bag?

- A) 0.1
- B) $\frac{1}{5}$
- C) 0.25
- D) $\frac{4}{5}$

7. Which comparison is true?

- A) $\frac{1}{3} > \frac{6}{9}$
- B) $\frac{2}{3} < \frac{10}{15}$
- C) $\frac{3}{7} > \frac{1}{10}$
- D) $\frac{7}{10} < \frac{14}{25}$

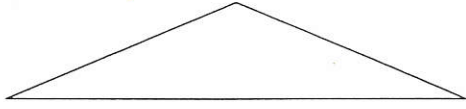
8. When two mixed numbers greater than 1 are multiplied, the product will always be

- A) equal to 0.
- B) equal to 1.
- C) less than the value of either mixed number.
- D) greater than the value of either mixed number.

9. Cohn's Construction Company hired w workers on Monday. On Tuesday, the company hired 5 extra workers. They now have a total of 48 workers. Which equation could be used to determine the exact number of workers hired on Monday?

- A) $48 = w \cdot 5$
- B) $w = 48 - 5$
- C) $48 = w - 5$
- D) $w = 48 \cdot 5$

10. The triangle below has 2 sides that are exactly the same length and one angle that measures 110° .



Which term best describes the triangle?

- A) equilateral
- B) isosceles
- C) right
- D) scalene

ANSWER KEY

SAMPLE MATH ASSESSMENT

Based On Released Items From 6th Grade Kansas Mathematics Assessments
(One Indicator From Each Benchmark Assessed)

1. Marie is buying 2 hamburgers for \$1.49 each and 2 cartons of milk for \$0.89 each. Which expression would provide the best ESTIMATE of the total amount of money that she will spend?

[Standard 1 – "Number and Computation", Benchmark 3 "Estimation", Indicator "A2"]

- A) $(2 \times 1) + (2 \times 1)$
- B) $(2 \times 1.5) + (2 \times 0.5)$
- C) $(2 \times 1.5) + (2 \times 1)$ ----- **Correct Answer**
- D) $(2 \times 2) + (2 \times 1)$

2. The numbers shown below follow a pattern.

64 128 256 512 ?

Which rule could be used to find the next number in the pattern?

[Standard 2 – "Algebra", Benchmark 1 "Patterns", Indicator "K4"]

- A) add 64 to the previous number
- B) add 128 to the previous number
- C) multiply the previous number by 2 ----- **Correct Answer**
- D) multiply the previous number by 4

3. In 12 kilograms there are exactly how many hectograms?

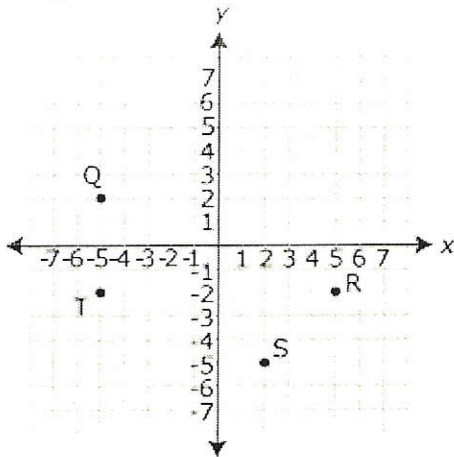
[Standard 3 – "Geometry", Benchmark 2 "Measurement and Estimation", Indicator "K3"]

- A) 0.12 hectograms
- B) 1.2 hectograms
- C) 120 hectograms ----- **Correct Answer**
- D) 1200 hectograms

4. Four points are shown on the coordinate plane below.

Which point is located at $(-5, 2)$?

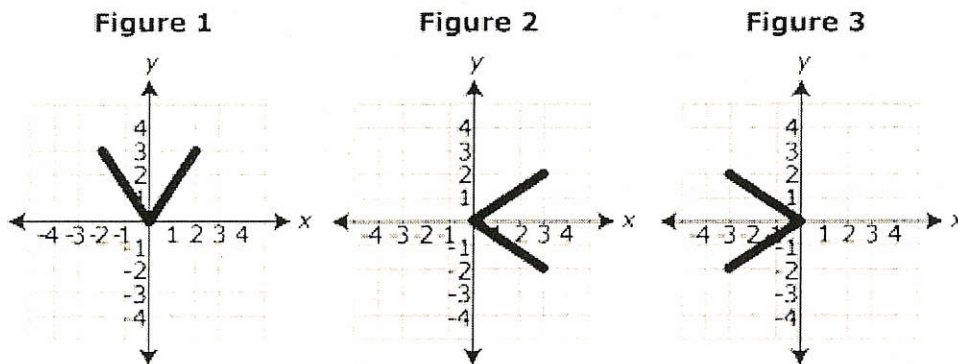
[Standard 3 – "Geometry", Benchmark 4, "Geometry from an Algebraic Perspective", Indicator "K3"]



- A) point Q ----- **Correct Answer**
- B) point R
- C) point S
- D) point T

5. The diagrams below show Figure 1 transformed two times: first to Figure 2, and then from Figure 2 to Figure 3.

[Standard 3 – "Geometry", Benchmark 3 "Transformational Geometry", Indicator, "K1"]



Based on the diagrams, which two transformations were performed on Figure 1?

- A) first a reflection, then a rotation
- B) first a rotation, then a translation
- C) first a translation, then a reflection
- D) first a rotation, then a reflection----- **Correct Answer**

6. A bag contains 10 marbles. There are 3 yellow marbles, 2 red marbles, and 5 green marbles in the bag. What is the probability of randomly selecting a red marble from the bag?

[Standard 4 – "Data", Benchmark 1 "Probability", Indicator "K4"]

- A) 0.1
- B) $\frac{1}{5}$ ----- **Correct Answer**
- C) 0.25
- D) $\frac{4}{5}$

7. Which comparison is true?

[Standard 1 – "Number and Computation", Benchmark 1 "Number Sense", Indicator "K2"]

- A) $\frac{1}{3} > \frac{6}{9}$
- B) $\frac{2}{3} < \frac{10}{15}$
- C) $\frac{3}{7} > \frac{1}{10}$ ----- **Correct Answer**
- D) $\frac{7}{10} < \frac{14}{25}$

8. When two mixed numbers greater than 1 are multiplied, the product will always be

[Standard 1 – "Number and Computation", Benchmark 4 "Computation", Indicator "K2"]

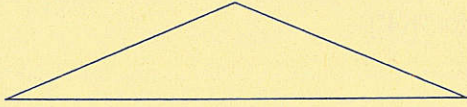
- A) equal to 0.
- B) equal to 1.
- C) less than the value of either mixed number.
- D) greater than the value of either mixed number. ----- **Correct Answer**

9. Cohn's Construction Company hired w workers on Monday. On Tuesday, the company hired 5 extra workers. They now have a total of 48 workers. Which equation could be used to determine the exact number of workers hired on Monday?

[Standard 2 – "Algebra", Benchmark 2 "Variables, Equations, and Inequalities", Indicator "A1"]

- A) $48 = w \cdot 5$
- B) $w = 48 - 5$ ----- **Correct Answer**
- C) $48 = w - 5$
- D) $w = 48 \cdot 5$

10. The triangle below has 2 sides that are exactly the same length and one angle that measures 110° .



Which term best describes the triangle?

[Standard 3 – "Geometry", Benchmark 1 "Geometric Figures and Their Properties", Indicator "K7"]

- A) equilateral
- B) isosceles -----**Correct Answer**
- C) right
- D) scalene

SAMPLE READING ASSESSMENT

Based on Released Passage and Items
From 8th Grade Kansas Reading
Assessment



Read the following passage and answer the questions by circling the correct answer.

Rail Transportation Occupations

More than a century ago, freight and passenger railroads were the ties binding the Nation together and the engine driving the economy. Today, rail transportation remains a vital link in our Nation's transportation network and economy. Railroads deliver billions of tons of freight and thousands of travelers to destinations throughout the Nation, while subways and light-rail systems transport millions of passengers within metropolitan areas.

Locomotive engineers are among the most experienced and skilled workers on the railroad. Locomotive engineers operate large trains carrying cargo and passengers between stations. Most engineers run diesel locomotives, while a few operate electrically powered locomotives.

Before and after each run, engineers check the mechanical condition of their locomotive and make minor adjustments on the spot. Engineers receive starting instructions from conductors and move controls such as throttles and airbrakes to drive the locomotive. They monitor gauges and meters that measure speed, amperage, battery charge, and air pressure, both in the brake lines and in the main reservoir.

On the open rail and in the yard, engineers confer with conductors and traffic control center personnel via two-way radio or mobile telephone to issue or receive information concerning stops, delays, and train locations. They interpret and comply with orders, signals, speed limits, and railroad rules and regulations. They must have a thorough knowledge of the signaling systems, yards, and terminals on routes over which they operate. Engineers must be constantly aware of the condition and makeup of their train, because trains react differently to acceleration, braking, and curves, depending on the grade and condition of the rail, the number of cars, the ratio of empty to loaded cars, and the amount of slack in the train.

Rail yard engineers, dinkey operators, and hostlers drive switching or small "dinkey" engines within railroad yards, industrial plants, mines and quarries, or construction projects.

Railroad conductors coordinate the activities of freight and passenger train crews. Railroad conductors assigned to freight trains review schedules, switching

House Education Committee
Date: 3-21-07
Attachment # 3

orders, waybills, and shipping records to obtain loading and unloading information regarding their cargo. Conductors assigned to passenger trains also ensure passenger safety and comfort as they go about collecting tickets and fares, making announcements for the benefit of passengers, and coordinating activities of the crew to provide passenger services.

Before a train leaves the terminal, the conductor and engineer discuss instructions received from the dispatcher concerning the train's route, timetable, and cargo. During the run, conductors use two-way radios and mobile telephones to communicate with dispatchers, engineers, and conductors of other trains. Conductors use dispatch or electronic monitoring devices that relay information about equipment problems on the train or the rail. They may arrange for the removal of defective cars from the train for repairs at the nearest station or stop. In addition, conductors may discuss alternative routes if there is a defect or obstruction on the rail.

Yardmasters coordinate activities of workers engaged in railroad traffic operations. These activities include making up or breaking up trains and switching inbound or outbound traffic to a specific section of the line. Some cars are sent to unload their cargo on special tracks, while other cars are moved to other tracks to await assemblage into new trains destined for different cities. Yardmasters inform engineers where to move the cars to fit the planned train configuration. Switches, many of them operated remotely by computer, divert the locomotive or cars to the proper track for coupling and uncoupling.

Railroad brake, signal, and switch operators perform a variety of activities, such as operating track switches to route cars to different sections of the yard. They may signal engineers and set warning signals, help to couple and uncouple rolling stock to make up or break up trains, or inspect couplings, airhoses, and handbrakes. Traditionally, freight train crews included either one or two brake operators — one in the locomotive with the engineer and another who rode with the conductor in the rear car. Brake operators worked under the direction of conductors and did the physical work involved in adding and removing cars at railroad stations and assembling and disassembling trains in railroad yards. In an effort to reduce costs and take advantage of new technology, most railroads have phased out brake operators. Many modern freight trains use only an engineer and a conductor, stationed with the engineer, because new visual instrumentation and monitoring devices have eliminated the need for crewmembers located at the rear of the train.

In contrast to other rail transportation workers, subway and streetcar operators generally work for public transit authorities instead of railroads.

Subway operators control trains that transport passengers throughout a city and its suburbs. The trains run in underground tunnels, on the surface, or on elevated tracks. Operators must stay alert to observe signals along the track that indicate when they must start, slow, or stop their train. They also make announcements to riders, may open and close the doors of the train, and ensure that passengers get on and off the subway safely.

To meet predetermined schedules, operators must control the train's speed and the amount of time spent at each station. Increasingly, however, these functions are controlled by computers and not by the operator. When breakdowns or emergencies

occur, operators contact their dispatcher or supervisor and may have to evacuate cars.

Streetcar operators drive electric-powered streetcars, trolleys, or light-rail vehicles that are similar to streetcars that transport passengers in metropolitan areas. Some tracks may be recessed in city streets or have grade crossings, so operators must observe traffic signals and cope with car and truck traffic. Operators start, slow, and stop their cars so that passengers may get on and off with ease. Operators may collect fares and issue change and transfers. They also answer questions from passengers concerning fares, schedules, and routes.

1. According to the passage, which is **not** a duty of a streetcar operator?

- A. collecting fares
- B. issuing transfers
- C. reviewing waybills
- D. answering questions

2. According to the passage, which type of worker drives trolleys?

- A. rail yard engineers
- B. streetcar operators
- C. railroad conductors
- D. locomotive engineers

3. Based on the passage, railroads often choose to use computers instead of brake operators **most likely** because computers are

- A. more helpful.
- B. less expensive.
- C. more dependable.
- D. less complicated.

4. Based on the passage, yardmasters most likely do **not**

- A. give instructions.
 - B. deal with passengers.
 - C. operate switches.
 - D. communicate with workers.
-

5. Engineers must be aware of the ratio of empty to loaded cars on their trains and the condition of the rails because these can affect the

- A. way the train reacts to braking and acceleration.
 - B. collection of fares and issuing of transfers to passengers.
 - C. method used to assemble the train in the yard.
 - D. relay of information about equipment problems to operators.
-

6. In the first sentence, the descriptions of railroads as "the ties binding the Nation together" and "the engine driving the economy" are examples of which type of figurative language?

- A. metaphor
 - B. onomatopoeia
 - C. simile
 - D. personification
-

7. Phrases like *locomotive engineers* and *yardmasters* at the beginning of some paragraphs are in italics because they are

- A. the names of trains.
 - B. difficult to pronounce.
 - C. from a foreign language.
 - D. the jobs being described.
-

8. Switch operators route cars to different sections of the yard in order to

- A. issue transfers.
 - B. review schedules.
 - C. let passengers off.
 - D. inspect equipment.
-

9. The **main** topic of the passage is the

- A. decline of rail transportation jobs.
 - B. availability of rail transportation jobs.
 - C. types of rail transportation jobs.
 - D. training needed for rail transportation jobs.
-

10. The author uses description as the structure of the passage **mainly** to

- A. compare other jobs to railway jobs.
- B. persuade readers to get a railway job.
- C. explain the nature of each railway job.
- D. tell readers how to apply for railway jobs.

11. Which **best** summarizes the job of a locomotive engineer?

- A. Locomotive engineers coordinate the activities of freight and passenger train crews. They review freight train schedules, switching orders, and waybills. On passenger trains, they ensure passenger safety.
 - B. Locomotive engineers operate large trains carrying passengers and cargo. They check the mechanical conditions of their train and drive the engine. They must also be aware of the condition of the train and tracks at all times.
 - C. Locomotive engineers operate track switches to route trains to different parts of the yard. They also do the physical work of adding and removing cars at railroad stations and assembling trains in railroad yards.
 - D. Locomotive engineers coordinate the activities of workers engaged in railroad traffic operations. They switch traffic to specific sections of the line and inform workers where to move the cars to fit the planned train configuration.
-

Answer Key

Rail Transportation Occupations

1. According to the passage, which is **not** a duty of a streetcar operator? (R.8.1.4.10)

Correct Answer: C

2. According to the passage, which type of worker drives trolleys? (R.8.1.4.10)

Correct Answer: B

3. Based on the passage, railroads often choose to use computers instead of brake operators **most likely** because computers are (R.8.1.4.8)

Correct Answer: B

4. Based on the passage, yardmasters most likely do **not** (R.8.1.4.5)

Correct Answer: B

5. Engineers must be aware of the ratio of empty to loaded cars on their trains and the condition of the rails because these can affect the (R.8.1.4.8)

Correct Answer: A

6. In the first sentence, the descriptions of railroads as "the ties binding the Nation together" and "the engine driving the economy" are examples of which type of figurative language? (R.8.1.3.4)

Correct Answer: A

7. Phrases like *locomotive engineers* and *yardmasters* at the beginning of some paragraphs are in italics because they are (R.8.1.4.2)

Correct Answer: D

8. Switch operators route cars to different sections of the yard in order to (R.8.1.4.8)

Correct Answer: D

9. The **main** topic of the passage is the (R.8.1.4.10)

Correct Answer: C

10. The author uses description as the structure of the passage **mainly** to (R.8.1.4.6)

Correct Answer: C

11. Which **best** summarizes the job of a locomotive engineer? (R.8.1.4.9)

Correct Answer: B
