New England Common Assessment Program

Student Work Samples
2009

Grade 8

Mathematics

11

(4, 3)

11

$y = 3 \quad x = 4$

11

L=(5, 6) L=(4, 3)

K=(3, 5)

11

The cordinates of point K 3 up 4 over.

12

His data may be wrong because if the 50 teenagers are at a jazz concert that means they probably prefer jazz.

Steve's data may be biased because he is surveyi
in one spot.

12

12

Steves data may be biased because he only surveyed 50 teenagers. If he surveyed 100 he could have gotten an exact answer.

13

30% - 100 - 30
30% - 400 - 120

50% - 200 - 100

There could be 200 students at Bayville because 50% of 200 is 100, which is less than 120.

13

$\frac{x}{400} = \frac{30}{100}$ $x=120$ Number of athletes at Edgemont school

So the highest number of athletes at Bayville could be 119.
$119 \cdot 2 = 238$ Since the number of athletes at Bayville is 50%, multiply 119 by 2. You get 238, so 238 is one possible amount of students at Bayville.

13

A possible amount for the Bay Feild school to have for student is 938.

13

Edgemont has 120 athletes,
Bayville has 239 kids or less.

$$\begin{array}{r} 219 \\ \times\ .10 \\ \hline 21.90 \\ \times\ 5 \\ \hline 109 \end{array}$$

$$\begin{array}{r} 239 \\ \times\ .10 \\ \hline 23.90 \\ \times\ 5 \\ \hline 119.50 \end{array}$$

$$\begin{array}{r} 400 \\ \times\ .10 \\ \hline 40.00 \\ \times\ 3 \\ \hline 120.00 \end{array}$$

13

400 = E.M. School - 30% are athletes.

133 are athletes.

X = B.V. School - 50% are athletes

x=250 students or less because if half are athletes, there can't be too many students in the school.

14

$$\begin{array}{r} 36 \\ \cdot 36 \\ \hline 1296 \end{array}$$

area square = 1,296

area semi = $\frac{\pi r^2}{2}$

$$\frac{3.14 \cdot 18^2}{2}$$

$$\frac{3.14 \cdot 324}{2} = 508.68$$

$$\begin{array}{r} 1296 \\ + \ 508.68 \\ \hline 1804.68 \end{array}$$

area = 1805

14

$36 \cdot 36 = 1296$

$18^2 \cdot \pi = 1017.87602$

Answer:

$\boxed{1805 \text{ in.}^2}$

$1017.87602 \div 2 = 508.9380099$

$$\begin{array}{r} 1296 \\ + \ 508.9380099 \\ \hline \boxed{1804.93801 \text{ in.}^2} \end{array}$$

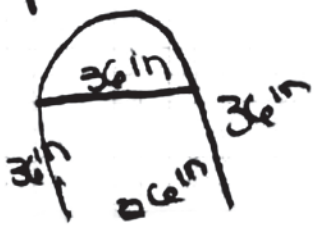
14

$$\begin{array}{r} 36 \\ \times 36 \\ \hline 1296 \end{array} \qquad \begin{array}{r} 36 \\ \times 3.14 \\ \hline 113.04 \end{array} \qquad \begin{array}{r} 113.04 \\ +1296.00 \\ \hline 1409.04 \end{array}$$

14

$$\begin{array}{r} {}^{2}36 \\ \times\ 4 \\ \hline 144 \end{array}$$

144 in



15

a. John walks 0.4 kilometers.

0.6 - 0.2 = 0.4

b. Brian is riding at a speed of 0 kilometers per minute.

c. Brian and John travel at the same speed between minutes 6 and 10.

I know this is proved true because both are going at a speed of 0.1 kilometers per minute. On the graph, their lines are parallel to each other, meaning the rate at which they're traveling is the same.

15

a) John walks 0.4 kilometers during that time.

b) 0 is his speed. He just stays there for 4 minutes not moving.

c) Between 6 and 10 they are traviling at the same speed.

15

A. .2+.6=.8
.8 kilometers walked from 3-8 minutes.

B. He is riding 0 kilometers per hour between 11 and 15 minutes. The line goes strait.

C. Between 6 minutes and 10 minutes the boys go the same speed. I know this because their lines are parralel. This means they traveled the same distace in the same amount of time while the lines were parralel. If they went different speeds, the lines would be closer together or farther apart and may be meet. That is how I know they went the same speed.

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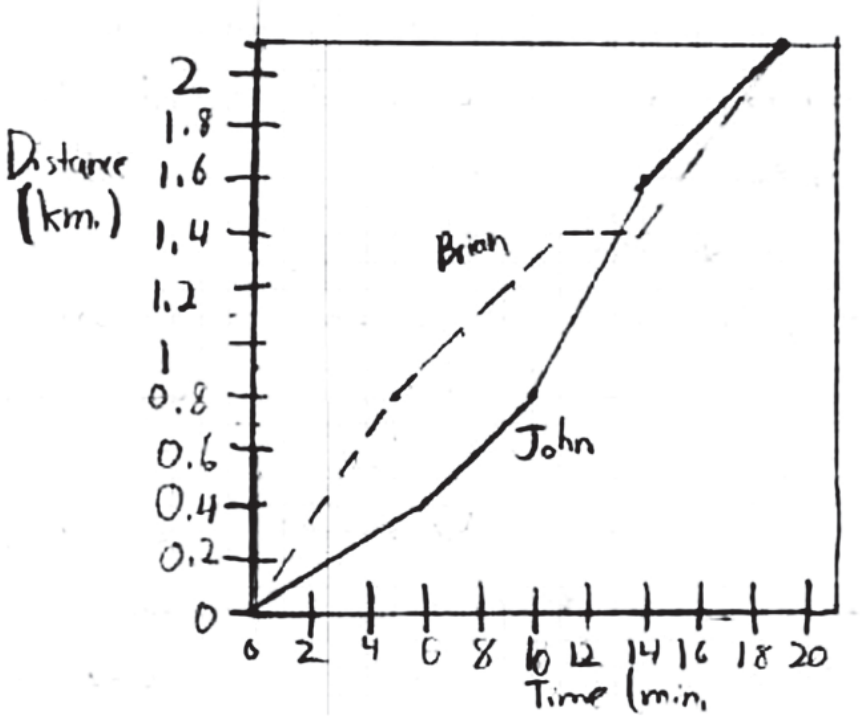
a. 0.6 - 0.2 = 0.4 km.

b. 1.4 km

c. Between minutes 6 to 10.



15

A 3 min-0.2
8 min-0.6

B. speed is 0

C. between 13 and 18 because they are traveling at a constant speed.

15

a. 2.3 kilometers

b 1.4 miles per hour

c. at distance 13 because that is when they cross over each others path.