



Wednesday June 6th, 2012

SCHEDULE

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Download Handout #1 From Website
[9.3LastNameEQAOMiniMock3.pdf](#)

Learning Goals:

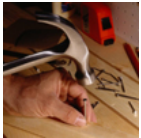
Today we will attempt a few problems from the 2008 Winter EQAO Test and share our solutions via Apple TV



Mind Buster:
Warm Up



Unit 9 - EQAO & Exam Prep
Sec. 9.3 - EQAO Mini-Mock Test



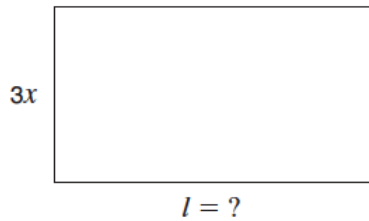
Constructive Criticism:
How Can We Improve?





Winter 2008 #1

- 1** The area of the rectangle shown below is $6xy^2$ square units.



Hint: $A = lw$

If the width is $3x$ units, which expression represents the length of the rectangle?

- a $2xy^2$ units
- b $2y^2$ units
- c $3xy^2$ units
- d $3y^2$ units

Winter 2008 #2

- 2** The expression below can be simplified.

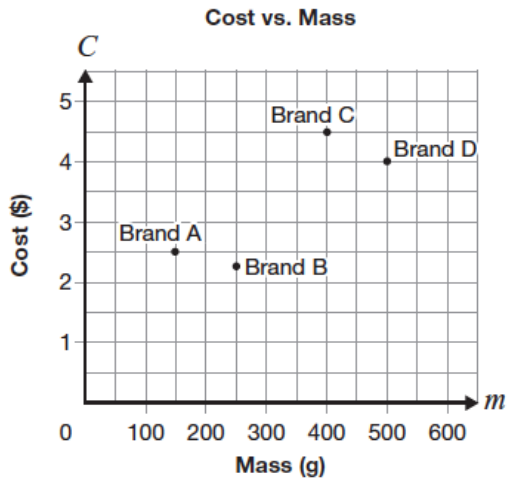
$$\frac{(x^2y)^3}{(xy)^2}$$

Which of the following shows the expression in its simplest form?

- a x^4y
- b x^4
- c xy
- d x^3y



- 3** The following graph shows the relationship between the mass and the cost of four different brands of strawberry jam.



Which statement is true?

- a Brand A has the lowest cost.
- b Brand B has the smallest mass.
- c Brand C has the highest cost per gram.
- d Brand D has the lowest cost per gram.

Winter 2008 #4



- 4** Which of the following represents the expression $2(3x + 4) + 3(x - 1)$ in a simplified form?

- a $9x + 3$
- b $9x + 5$
- c $8x + 8$
- d $8x + 11$



Winter 2008 #7

- 5** Gerry has a table of values representing a linear relation. Two of the numbers are hidden behind a ketchup spill.

x	y
-2	-6
-1	
0	
1	18

The values that are hidden are

- a -2 and 14.
- b 0 and 12.
- c 2 and 10.
- d 3 and 9.

Winter 2008 #8

- 6** Nadia lives 11.4 km from school and rides her bike to school every day.

The equation $d = 11.4 - 0.6t$ represents the relationship between d , her distance from school in km, and t , her time spent travelling in minutes.

If she leaves home at 8:05 a.m., what time will she get to school?

- a 8:11 a.m.
- b 8:16 a.m.
- c 8:17 a.m.
- d 8:24 a.m.



TECUMSEH VISTA ACADEMY

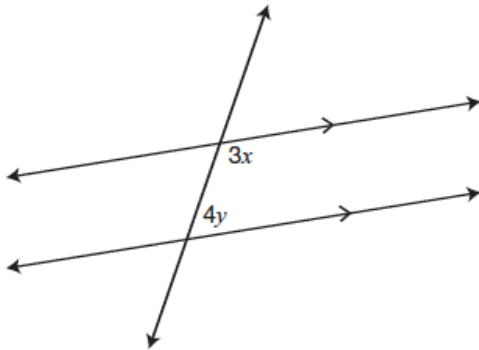
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Winter 2008 #11

- 7** The relation shown below can be expressed as $3x + 4y - 180 = 0$.

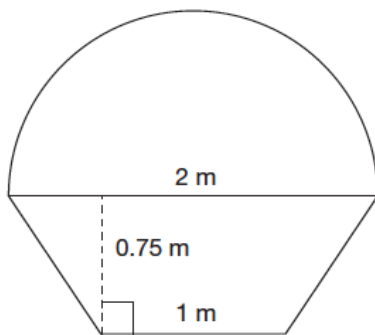


Another way to write this relation is

- a $y = \frac{3}{4}x - 45$.
- b $y = -\frac{3}{4}x + 45$.
- c $y = -\frac{4}{3}x + 60$.
- d $y = \frac{4}{3}x - 60$.

Winter 2008 #17

- 8** The Cutie Cupcake Company is having a sign made. The sign will be a semicircle on top of a trapezoid.



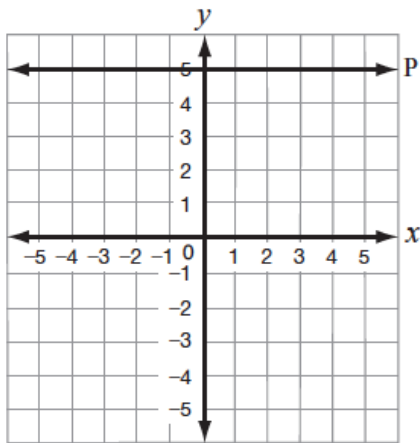
Which of the following is closest to the total area of the sign?

- a 4.27 m^2
- b 2.70 m^2
- c 1.57 m^2
- d 1.13 m^2

Winter 2008 #12

9

Line P is shown below.



Which equation represents Line P?

- a $x = 5$
- b $y = 5$
- c $y = x + 5$
- d $x = y + 5$

Winter 2008 #19

10

If the radius of a sphere is tripled, the surface area of the sphere will increase

- a by a factor of 3.
- b by a factor of 4.
- c by a factor of 6.
- d by a factor of 9.



TECUMSEH VISTA ACADEMY

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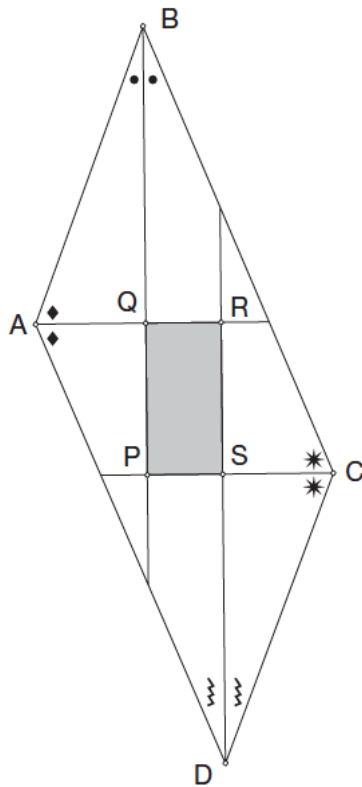
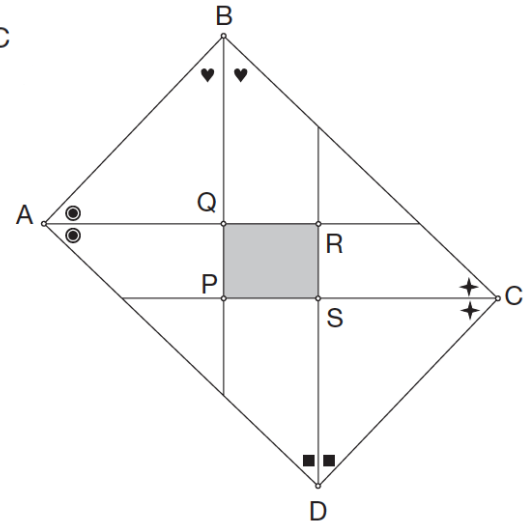
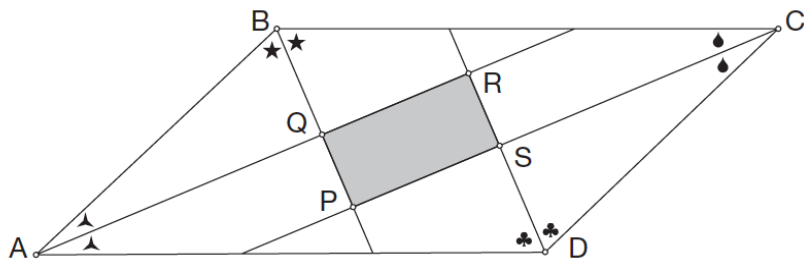


Parallelograms

Three students each construct a different parallelogram using dynamic geometry software.

In each parallelogram, $\angle A$, $\angle B$, $\angle C$ and $\angle D$ are bisected and the lines are extended to intersect the opposite sides.

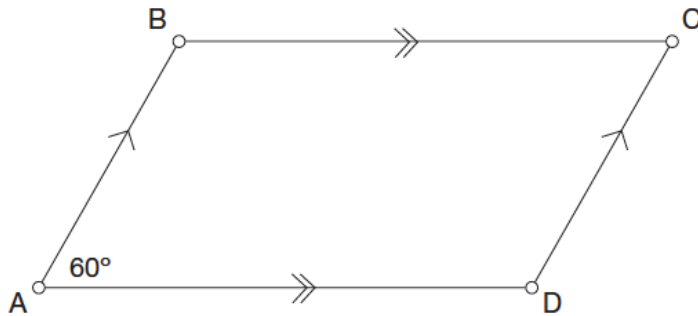
The three results are shown below.



- a) Look at the shaded shape, PQRS, in each diagram above. Make a hypothesis about the shape of PQRS.



- b) ABCD is a **parallelogram** where $\angle A = 60^\circ$. Find the measures of $\angle B$, $\angle C$ and $\angle D$ and write them on the diagram below. **Show your work.**



TECUMSEH VISTA ACADEMY

MATHLETES

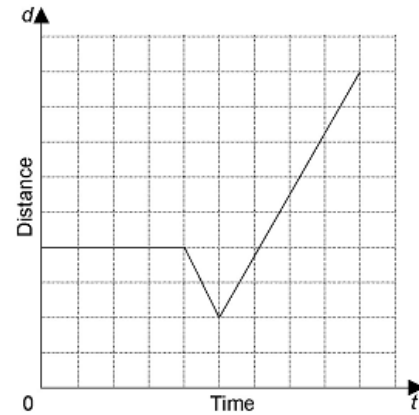
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Unit 1 Review - Relations

2.6 Distance-Time Graphs, pages 88–94

10. Write a story that could be represented by the graph.



11. Draw a distance-time graph to represent this situation:

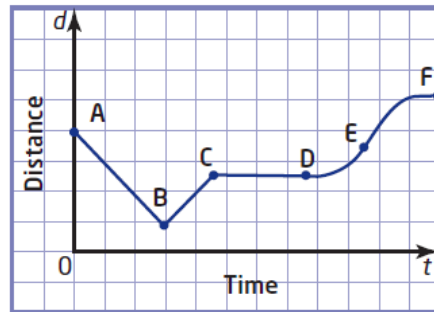
Chad went for a bike ride to the store which is approximately 5 km away. On the way to the store, he was riding against the wind. On the way home, he was riding with the wind (the wind was at his back). The entire trip lasted about 60 minutes.



3. Estimating values beyond the known data for a relation is

- A extrapolation
- B interpolation
- C a line of best fit
- D discarding outliers

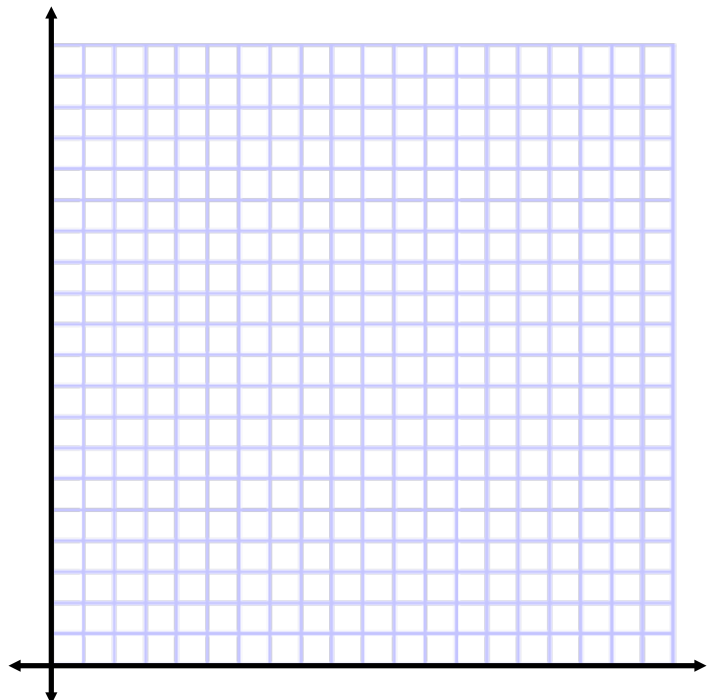
8. Briefly describe the motion represented by each section of this distance-time graph.



10. After landing on Mars, a spacecraft shoots out a probe to take measurements away from any possible contamination at the landing site. This table shows the probe's height during the first 4 s of its flight.

Time (s)	Height (m)
0	1.0
0.5	5.5
1.0	9.2
1.5	11.8
2.0	13.6
2.5	21.4
3.0	14.4
3.5	13.3
4.0	11.4

- a) Make a scatter plot of the data. Label your graph.
- b) Describe the relationship between time and the height of the probe.
- c) Identify any outliers. What could cause such outliers?
- d) Draw a line or a curve of best fit, excluding any outliers.
- e) Estimate the probe's height after 5 s.

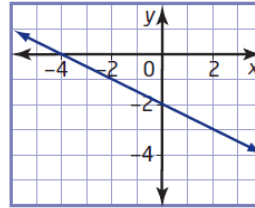




1. Which are the slope and the y-intercept of the line $y = -3x - 1$?

- A $m = 3, b = 1$
- B $m = -3, b = 1$
- C $m = -3, b = -1$
- D $m = \frac{1}{3}, b = -1$

2. What are the x- and y-intercepts of the line?



- A x-intercept = 2, y-intercept = 4
- B x-intercept = -2, y-intercept = -4
- C x-intercept = -4, y-intercept = 2
- D x-intercept = -4, y-intercept = -2

3. Which line is parallel to the line

$$y = \frac{1}{5}x - 1?$$

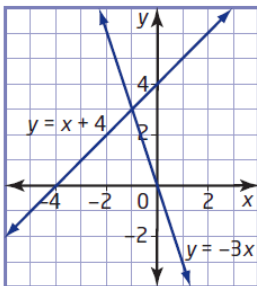
- A $y = -\frac{1}{5}x - 1$
- B $y = \frac{1}{5}x + 3$
- C $y = 5x + 1$
- D $y = -5x - 4$

4. Which line is perpendicular to the line

$$y = \frac{3}{2}x - 1?$$

- A $y = \frac{2}{3}x + 1$
- B $y = -\frac{2}{3}x + 4$
- C $y = \frac{3}{2}x - 3$
- D $y = -\frac{3}{2}x - 1$

5. Which is a solution to the linear system?



- A $(-1, 3)$
- B $(-4, 0)$
- C $(0, 4)$
- D $(3, -1)$

7. a) What are the x- and y-intercepts of the line $3x - y = 6$?

b) Use this information to graph the line.