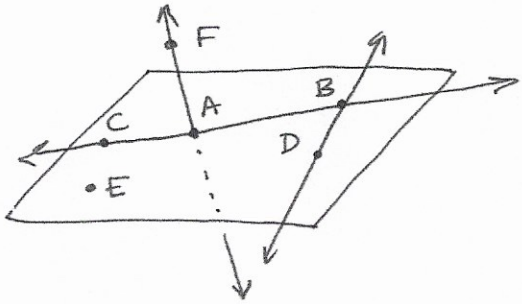
SRHS - Math 1 - Assignment #Review 8B

Be sure to show all your work and thinking in the space provided. NO WORK = NO CREDIT

Midpoint: $\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}\right)$ Distance = $\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$

1. Use the figure to the right.



a) Give a different name for $\overline{AB}$.

$\overline{BA}$

b) Name three points that are collinear.

A, B, and C

c) Name a point that is *not* coplanar with C, D, and E

F

d) Name two *different* lines

$\overleftrightarrow{AF}$ and $\overleftrightarrow{AB}$ (for example)

2. Point B is between A and C on $\overline{AC}$.
Use the information to write an equation in terms of x. Then find the length of $\overline{AB}$

Show work for #2 here:

A — B — C

$3x+7+10 = 5x+11$

$3x+17 = 5x+11$

$-3x \quad -11 \quad -3x \quad -11$

$6 = 2x$

$x = 3$

$AB = 3x+7$

$= 3(3)+7$

$AB = 7x+3$

$BC = 10$

$AC = 5x+11$

The length of $\overline{AB}$ = 16

3. The endpoints of $\overline{JK}$ are J (3, 11) and K (-1 , 5)

Show work for #3a and #3b here:

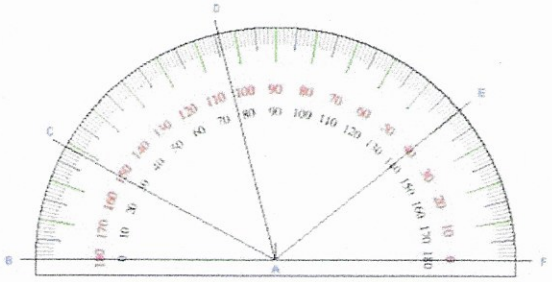
a) Find the coordinates of the midpoint.

$mp = \left(\frac{3-1}{2}, \frac{11+5}{2}\right) = (1, 8)$

b) Find the length of $\overline{JK}$ using the distance formula

$\sqrt{52}$

4. Use the figure to the right

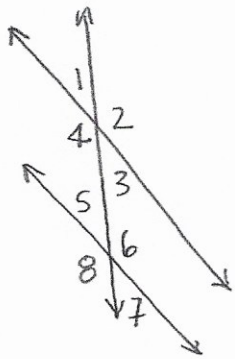


a) Find the m ∠EAF = 40°

b) Find the m ∠BAC = 29°

c) Find the m ∠DAE = 64°

5. Use the figure to the right.



a) Name a vertical angle pair that includes ∠2

∠2 and ∠4

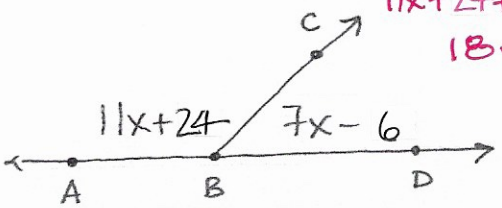
b) Name a linear angle pair that includes ∠8

∠5 and ∠8

or

∠7 and ∠8

6. a) Find $m\angle ABC$



$11x+24+7x-6=180$

$18x+18=180$

$-18\quad -18$

$\frac{18x}{18}=\frac{162}{18}$

$x=9$

$m\angle ABC = 11x+24$

$= 11(9)+24$

$= 123°$

b) If $\angle X$ and $\angle Y$ are supplementary, and $m\angle X = 98°$, find $m\angle Y$.

$m\angle X + m\angle Y = 180$

$98° + m\angle Y = 180$

$-98° \qquad -98°$

$m\angle Y = 82°$

7. Write the equation of the line that contains the points (3 , 11) and (-1 , 5)

Show work for #7 here:

$m = \frac{5-11}{-1-3} = \frac{-6}{-4} = \frac{3}{2}$

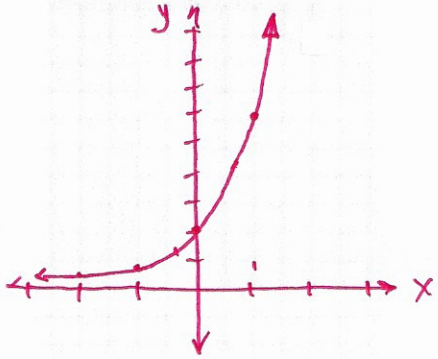
$y-11=\frac{3}{2}(x-3)$ or $y-5=\frac{3}{2}(x+1)$

8. For the function: $y = 2(3)^x$

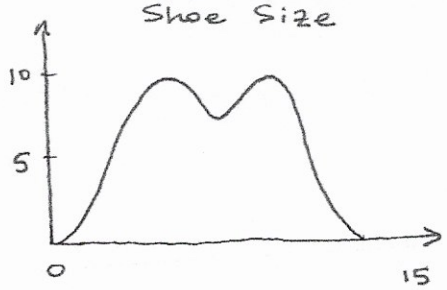
a) Complete the table:

x	y
-2	2/9
-1	2/3
0	2
1	6
2	18

b) Graph the function:



9. Describe the shape, center, spread and outliers.



- The shape is symmetric with two mounds
- The center is about 7
- The spread is a range of about 13
- There are no obvious outliers

10. Use the two-way table about pizza preferences:

		Grade		
		11th	12th	Total
Pizza	Cheese	17	29	46
	Veggie	8	11	19
	Total	25	40	65

a) What percent of students prefer veggie pizza?

$19/65 \approx 29.23\%$

b) What percent of students are 12th grade students ?

$40/65 \approx 61.54\%$

c) What percent of those who prefer cheese pizza are 11th grade students ?

$17/46 \approx 36.96\%$

d) Of those who are seniors, what percent prefer veggie pizza?

$11/40 = 27.50\%$