

Geometry Chapter 1 Review

Find a pattern for the following sequences.

1.) 6, 10, 14, 18, 22...

$+4$ $+4$

$+4$ 26

2.) 5, 8, 12, 17, 23...

3.) 60, 40, 30, 25, 22.5...

-20 -10 -5 -2.5 -1.25

Halving the difference

4.) -2, 6, -18, 54, -162...

21.25

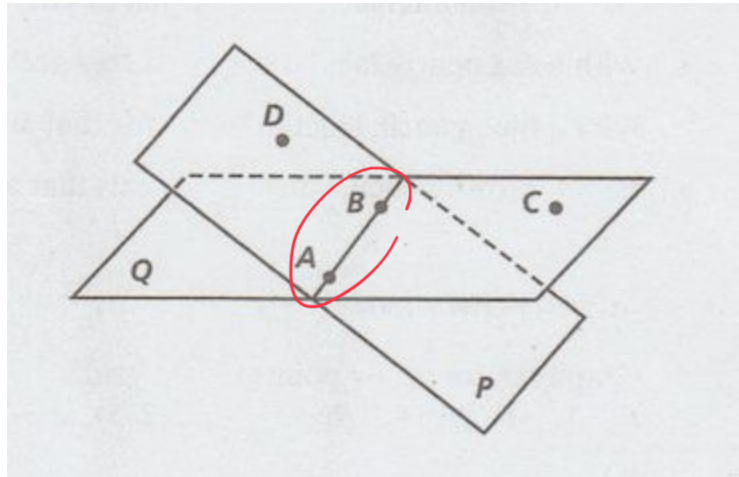
Use the illustration to answer the following.

1.) What is the intersection of planes P and Q?

\overline{AB}

2.) List two pairs of collinear points.

3.) What is the minimum requirement for a plane? Include one from the illustration.



A line and a noncollinear point

3 noncollinear points

Plane P : ABD

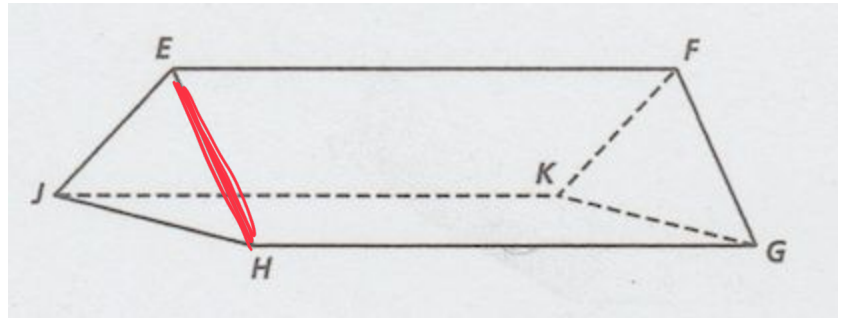
Plane Q : ABC

Use the illustration to answer the following.

- 1.) Name all of the segments parallel to EH.

FG

- 2.) Name all segments skew to HG.



Include proper arrow format for each of the following.

- 1.) Draw a line segment featuring points A and B.



- 2.) Draw line CD.

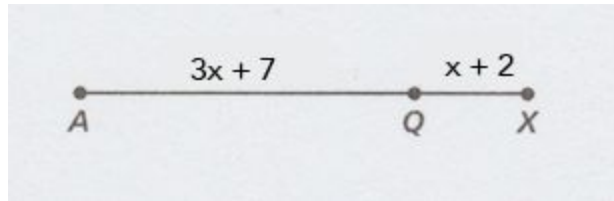
- 3.) Draw the ray XY.



If $AX = 57$, find the value of each of the following.

1.) AQ

$$\begin{aligned}
 &3x + 7 \\
 &\quad \downarrow \\
 &3(12) + 7 \\
 &36 + 7 = \boxed{43}
 \end{aligned}$$



2.) $x = \boxed{12}$

$$\overline{AQ} + \overline{QX} = \overline{AX}$$

$$3x + 7 + x + 2 = 57$$

$$\begin{aligned}
 4x + 9 &= 57 \\
 -9 &\quad -9
 \end{aligned}$$

$$\begin{aligned}
 4x &= 48 \\
 \frac{4x}{4} &= \frac{48}{4}
 \end{aligned}$$

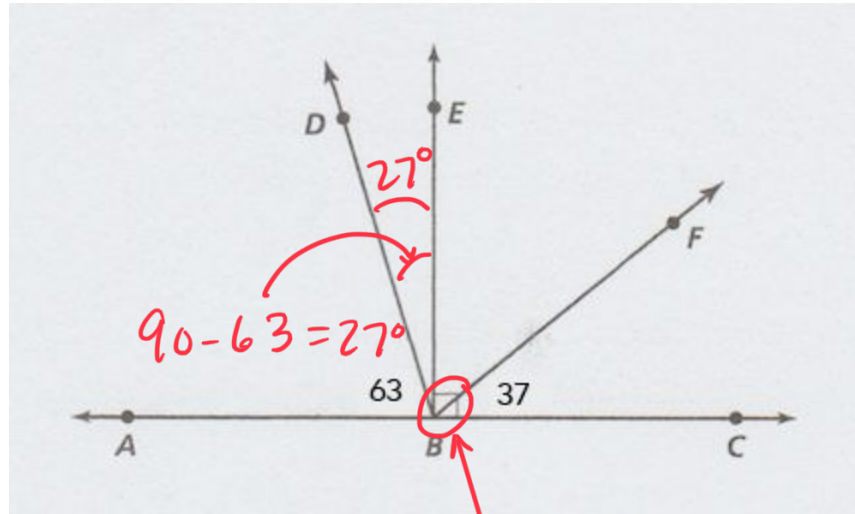
$$x = 12$$

Find the measure of each of the following angles.

1.) $\angle DBE$

2.) $\angle DBF$

3.) $\angle DBC$



$$90 - 63 = 27^\circ$$

$$\angle EBC = 90^\circ$$

$$\angle ABE = 90^\circ$$

Find the distance between the points.

1.) (2, 4) and (-6, 7)

$$\boxed{\sqrt{73}}$$

2.) (-1, -5) and (4, 7)

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$(2 - (-6))^2 + (4 - 7)^2$$

$$\sqrt{8^2 + (-3)^2}$$

$$\sqrt{64 + 9} = \boxed{\sqrt{73}}$$

3.) (-7, 0) and (-3, 2)

Find the midpoint of each segment.

1.) A (6, 7), B (-4, 1)

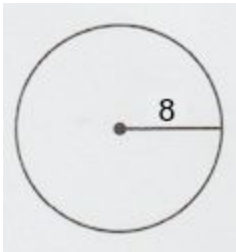
$$\left(\frac{6 + (-4)}{2}, \frac{7 + 1}{2} \right)$$

$$\left(\frac{2}{2}, \frac{8}{2} \right)$$

$$(1, 4)$$

2.) C (5, -3), D (-9, 2)

Find the circumference of the circle in terms of π .



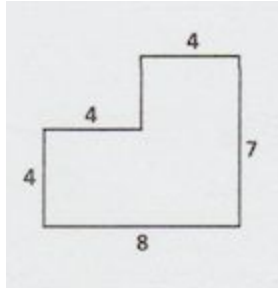
$$C = \pi d = 2\pi r$$

$$2\pi(8) = 16\pi \text{ units}$$

Find the perimeter and area of a rectangle when:

$$b = 8 \text{ cm}, h = 6 \text{ cm}$$

Find the perimeter and area for the following figure.



Find the area of the circle in terms of π .

