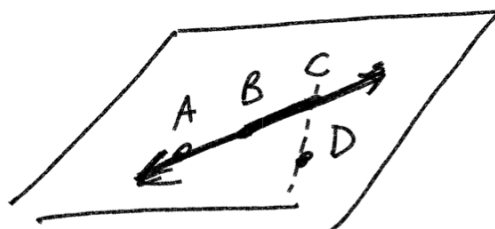


Minimum Requirement for Plane

- 3 noncollinear points
- 1 line and 1 noncollinear point

Plane



~~Plane ABC~~

A, B, and C are collinear

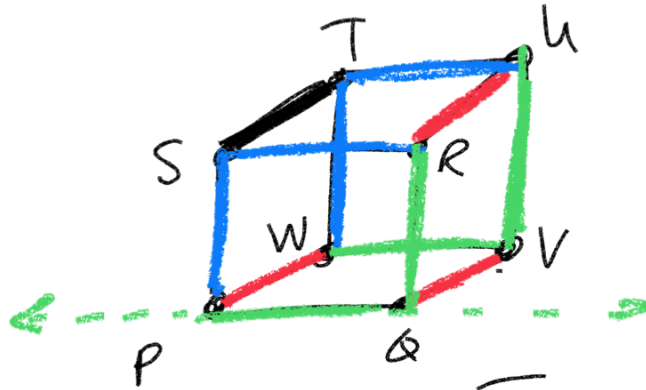
Plane DCB

BCD

\overline{AB} \overline{BC} \overline{DB}

Intersect with \overline{AB}

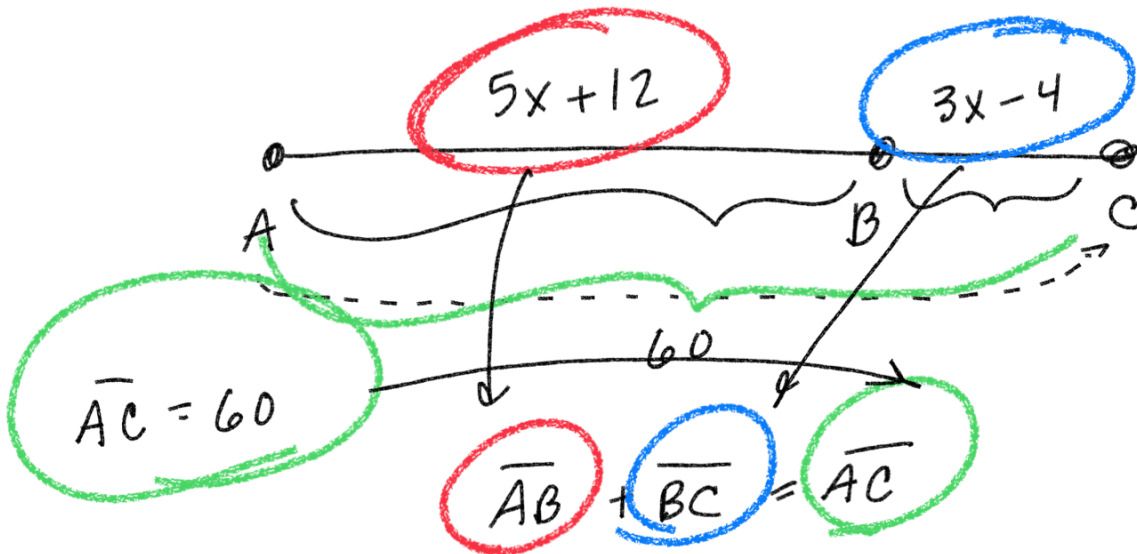
\overline{BC} \overline{DB}



Parallel \overline{ST}
 \overline{PW} , \overline{QV} , \overline{RU}

Intersecting \overline{ST}
 \overline{TU} , \overline{SP} , \overline{TW} , \overline{RS}

Skew \overline{ST}
 \overline{PQ} , \overline{WV} , \overline{UV} , \overline{RQ}



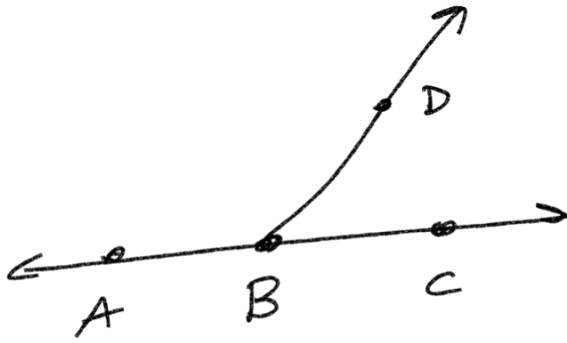
$$5x + 12 + 3x - 4 = 60$$

$$8x + 8 = 60$$

$$\quad \quad -8 \quad -8$$

$$\frac{8x}{8} = \frac{52}{8}$$

$$x = 6.5$$



$$\angle ABD + \angle DBC = \angle ABC$$

$$\angle ABC = 180^\circ$$

$$\begin{matrix} x_1, y_1 & x_2, y_2 \\ (3, 8) & (-2, -4) \end{matrix}$$

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

$$= \sqrt{(-2 - 3)^2 + (-4 - 8)^2}$$

$$\sqrt{(-5)^2 + (-12)^2}$$

$$\sqrt{25 + 49}$$

$$\sqrt{74}$$

Midpoint Formula

$$\left(\frac{x_2 + x_1}{2}, \frac{y_2 + y_1}{2} \right)$$

$$(3, 8) \quad (-2, -4)$$

$$\frac{3 + (-2)}{2} = M_x \left(\frac{3 + (-2)}{2}, \frac{8 + (-4)}{2} \right) = \left(\frac{1}{2}, \frac{4}{2} \right) = \left(\frac{1}{2}, 2 \right)$$

⑧ 3) (x, y)
 Midpoint formula $(0, -17)$

midpoint
 $(4, -7)$

$$\left(\frac{x_2 + x_1}{2}, \frac{y_2 + y_1}{2} \right)$$

$$\frac{x_2 + x_1}{2} = 4$$

$$\frac{y_2 + y_1}{2} = -7$$

$$\frac{3 + y_1}{2} = -7$$

$$2 \left(\frac{3 + x_1}{2} \right) = (4)2$$

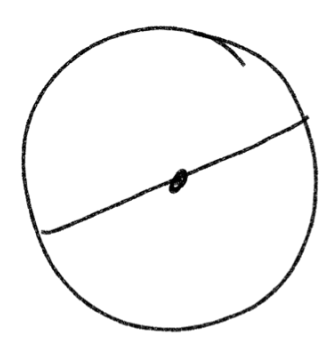
$$3 + y_1 = -14$$

$$3 + x_1 = -14$$

$$y_1 = -17$$

$$x = 0$$

$$d = 2r$$



diameter

$$C = \pi d$$

π

$$C = 2\pi r$$

Ⓐ



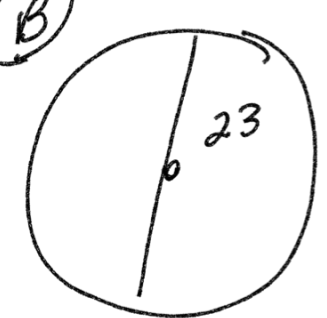
$$C = 2\pi r$$

$$2\pi(5)$$

$$10\pi$$

$$10\pi$$

Ⓑ



$$C = \pi d$$

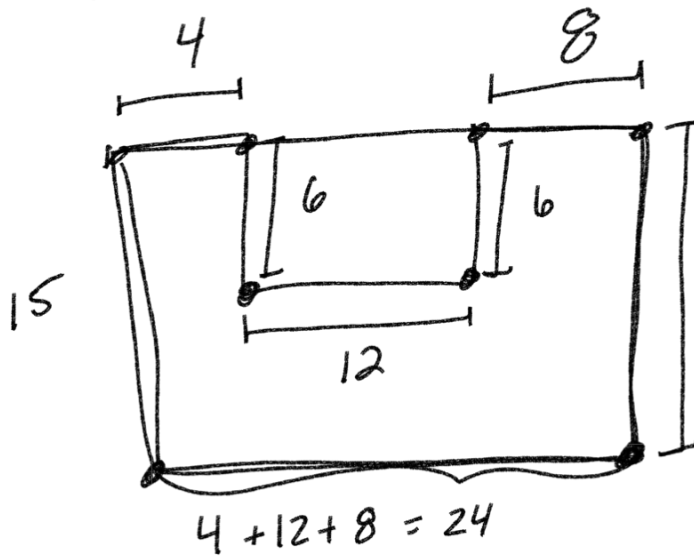
$$C = 23\pi$$

Perimeter of Rectangle

Area of Rectangle

$$P = 2b + 2h$$

$$A = bh$$



Perimeter

$$90 \text{ units}$$

Area

$$(24 * 15) - (12 * 6)$$

$$360 - 72 = 288$$

$$288 \text{ units}^2$$

$$24 + 15 + 8 + 6 + 12 + 6 + 4 + 15$$

$$30 + 30 + 10 + 20 = 90$$



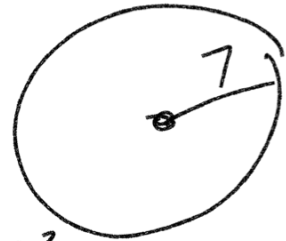
$$A = \pi r^2$$

$$d = 22$$

$$d = 2r$$

$$\frac{22}{2} = \frac{22}{2} \quad r = 11$$

$$A = \pi (11)^2 = 121\pi \text{ units}^2$$



$$A = \pi (7)^2$$

$$= 49\pi \text{ units}^2$$

2-1 Conditional Statements

If _____, then _____
hypothesis conclusion

If you are next to Nate, then you are adjacent to greatness.
hypothesis conclusion

Converse → switch the hypothesis and the conclusion

If you are adjacent to greatness, then you are next to Nate.



A good definition is one that is true forwards and backwards.

If you are on a school bus, then you are in a yellow vehicle true

Converse

If you are in a yellow vehicle, then you are on a school bus. False

If you are taking a class with Nate,
then you are taking a class with
the greatest "teacher" in the world.

True
→

Converse,

If you are taking a class with the greatest
"teacher" in the world, then you are taking a
class with Nate.

True
←

You are taking a class with the greatest
"teacher" in the world if, and only if,
you are taking a class with Nate

If Claire is hungry (A) → then she will eat
mashed potatoes. (B)

If Claire eats mashed potatoes (B) → she will
get corbed up and want to fight. (C)

Transitive Property (Syllogism) (A) → (C)

If Claire is hungry → then she will want
to fight.

Either
return the
test through
email — or
through Schoology

HW

Finish HWs
no Online HW

or Quiz —
Pre-Test

Ch 1 Test due Oct 1st
in parent's email →