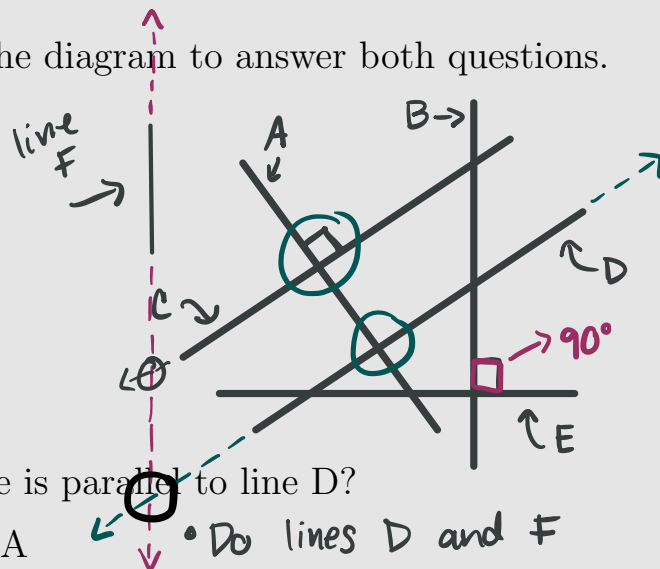


Topics to review:

- Parallel and perpendicular lines

### Problem

Refer to the diagram to answer both questions.



Which line is parallel to line D?

- (A) Line A
- (B) Line B
- (C) Line C
- (D) Line E
- (E) Line F?



- Do lines D and F intersect? YES!
- They are not parallel (F and D)
- F and B are!

Which line is perpendicular to line D? B?

- (A) Line A
- (B) Line B
- (C) Line C
- (D) Line E

- They do touch! (Intersect at some point)
- "lines B and D are not perpendicular bc they do not create a  $90^\circ$  angle at their intersection"
- Line B and E!

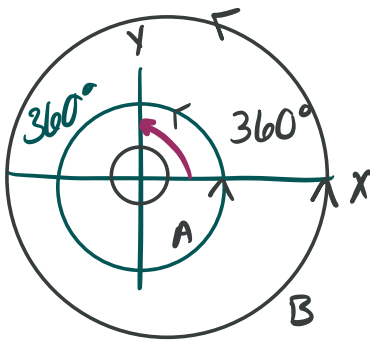
## Parallel lines



- Need 2 lines to decide if they are parallel (pair)
  - Comparison
- They never intersect
  - Do not touch, cross paths, overlap, etc.
-  Train tracks
  -  • side by side

• lines are abstract objects

• We can extend any line in either direction  
infinitely

\* "Extend infinitely w/out ever touching" ? \*



- Full circle  $\rightarrow 360^\circ$  
- Half circle  $\rightarrow 180^\circ$  
- $\frac{1}{4}$  of a circle  $\rightarrow \frac{360^\circ}{4} = 90^\circ$

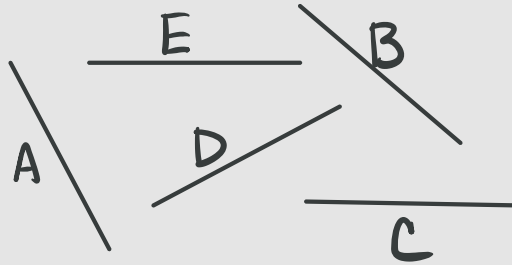
$$\frac{1}{4} \cdot 360 = \frac{1 \cdot 360}{4} = \frac{360}{4} \rightarrow \frac{1}{4} \cdot 360$$
$$0.25 \cdot 360$$

$$\frac{1}{4} \cdot \frac{360}{1} = \frac{360}{4}$$

• Multiplying fractions & whole numbers

**Problem 2**

Refer to the diagram to answer both questions. Note that the end points of a line can be extended infinitely in opposite directions.



Which line is perpendicular to line A?

- (A) Line B
- (B) Line C
- (C) Line D
- (D) Line E

Which line is parallel to line C?

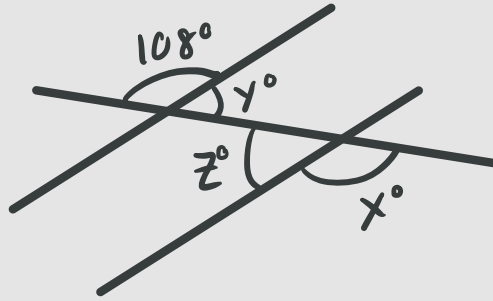
- (A) Line A
- (B) Line B
- (C) Line D
- (D) Line E

Topics to review:

- Angles, parallel lines, and transversals
- Missing angles with a transversal

**Problem**

Refer to the diagram to answer all 3 questions.



What is the measure of angle  $x$ ?

- (A)  $180^\circ$
- (B)  $90^\circ$
- (C)  $108^\circ$
- (D)  $72^\circ$

What is the measure of angle  $y$ ?

- (A)  $180^\circ$
- (B)  $90^\circ$
- (C)  $108^\circ$
- (D)  $72^\circ$

What is the measure of angle  $z$ ?

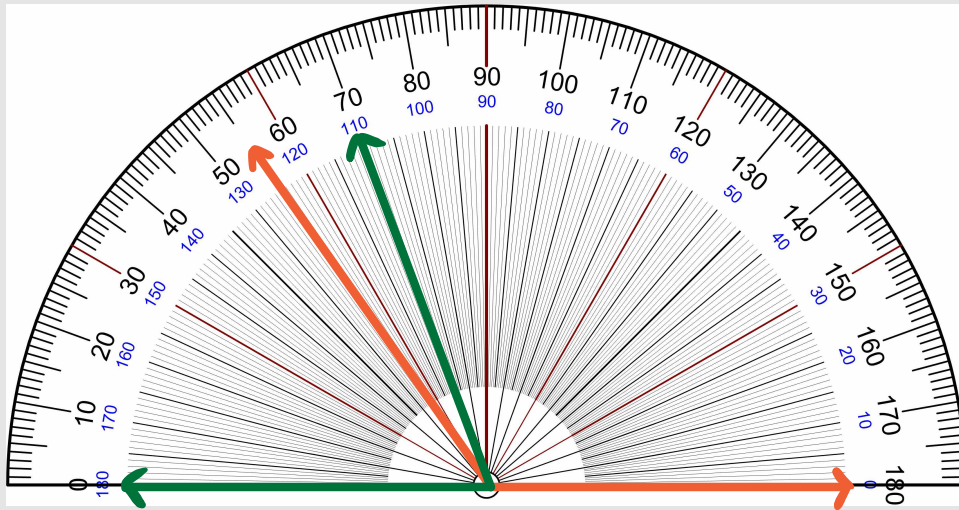
- (A)  $180^\circ$
- (B)  $90^\circ$
- (C)  $108^\circ$
- (D)  $72^\circ$

Topics to review:

- Using a protractor to measure angles

### Problem

Refer to the image when answering the questions.



What is the measure of the **orange angle**?

- (A)  $55^\circ$
- (B)  $145^\circ$
- (C)  $65^\circ$
- (D)  $125^\circ$

What is the measure of the **green angle**?

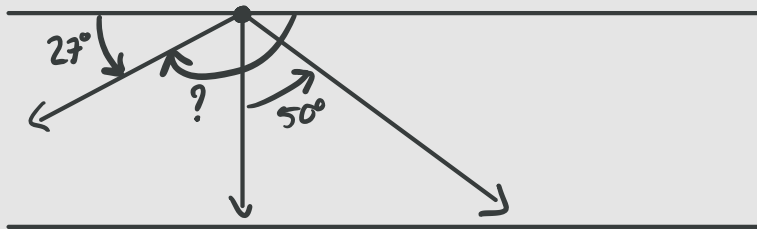
- (A)  $180^\circ$
- (B)  $70^\circ$
- (C)  $95^\circ$
- (D)  $110^\circ$

Topics to review:

- Solving for unknown angles

**Problem**

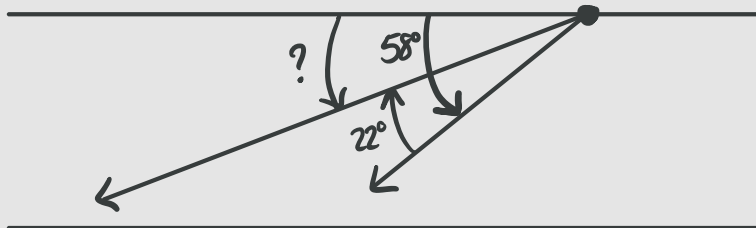
Refer to the diagram to answer question (1).



What is the measure of the unknown angle?

- (A)  $177^\circ$
- (B)  $66^\circ$
- (C)  $95^\circ$
- (D)  $153^\circ$

Refer to the diagram to answer question (2).



What is the measure of the unknown angle?

- (A)  $100^\circ$
- (B)  $22^\circ$
- (C)  $45^\circ$
- (D)  $36^\circ$