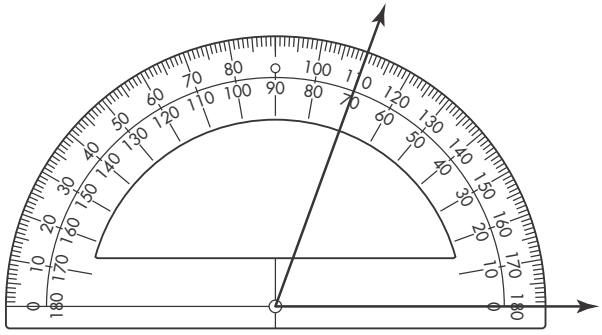
Name _____

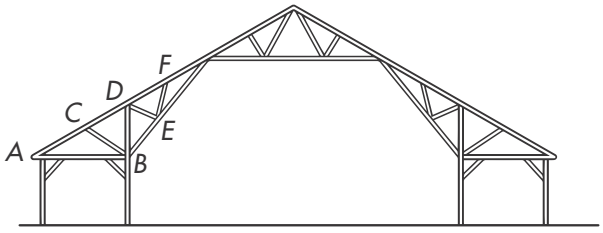
Topic **15**
Assessment

1. What is the measure of the angle shown below? Name a type of angle that has an angle measure greater than the angle shown. **2 points**



70°; Sample answer: Right angle

2. Josh needs to find the measures of the angles on a barn's trusses.



A. Find the measure of $\angle ABC$ if $\angle ABD$ is a right angle and $\angle CBD$ is 60°. Write and solve a subtraction equation. **2 points**

$90° - 60° = \angle ABC$;
$\angle ABC = 30°$

B. Find the measure of $\angle BEF$ if $\angle BED$ is 85° and $\angle DEF$ is 60°. Write and solve an addition equation. **2 points**

$85° + 60° = \angle BEF$;
$\angle BEF = 145°$

3. What is the measure of an angle that turns through $\frac{1}{5}$ of a circle? **1 point**

72°

4. Choose the correct term from the box to complete each statement. **1 point**

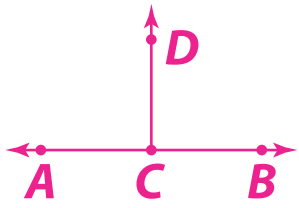
ray	line

A straight path of points that goes on and on in opposite directions is called a **line**.

A **ray** has one endpoint.

5. Draw an example of a line $\overleftrightarrow{AB}$. Label a point C between points A and B. Using point C, draw a ray $\overrightarrow{CD}$. **3 points**

Sample answer:



6. $\angle XYZ$ is a straight angle decomposed into 2 non-overlapping angles, $\angle XYW$ and $\angle WYZ$. If $\angle WYZ$ measures 52°, what type of angle is $\angle XYW$? What is the measure of $\angle XYW$? **2 points**

Obtuse, 128°

7. $\angle BAD$ and $\angle CAD$ share a ray. They form $\angle BAC$. The measure of $\angle BAC$ is 87°. The measure of $\angle BAD$ is 23°. Write and solve an equation to find the measure of $\angle CAD$. **2 points**

$87° - 23° = \angle CAD$; $\angle CAD = 64°$

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8. Luke divided circles into equal parts. Match each fraction with the equal angle measure. **1 point**

	90°	45°	72°	180°
$\frac{1}{2}$ of a circle	☐	☐	☐	■
$\frac{1}{4}$ of a circle	■	☐	☐	☐
$\frac{1}{5}$ of a circle	☐	☐	■	☐
$\frac{1}{8}$ of a circle	☐	■	☐	☐

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9. Select all the true statements. **1 point**

- [x] A right angle makes a square corner.
- [ ] An acute angle is open more than a right angle.
- [ ] A straight angle is open less than an obtuse angle.
- [x] All right angles have the same measure.
- [x] An obtuse angle is open more than an acute angle.

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10. Two streets meet at a 45° angle. Draw an angle to represent how the streets meet. **1 point**

Check students' drawings.

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11. Which geometric term best describes the stars in the night sky? **1 point**

- (A) Points
- (B) Rays
- (C) Line segments
- (D) Lines

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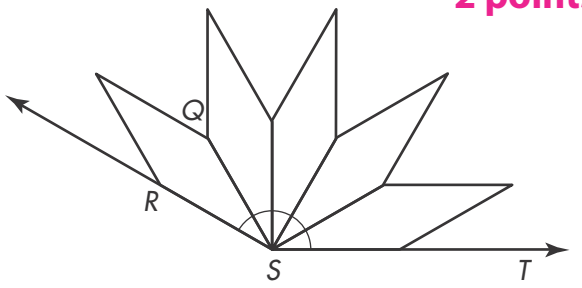
12. Anna drew $\angle RST$ using identical pattern blocks. The measure of $\angle RST$ is 150°. What is the measure of $\angle RSQ$? Explain. **2 points**



30°; Sample answer: There are 5 pattern blocks. $\angle RST$ measures 150°. $150° \div 5 = 30°$.

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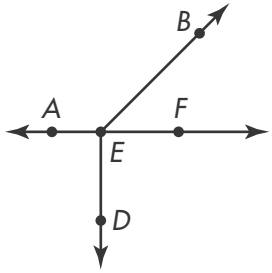
13. Identify an acute angle, a right angle, and an obtuse angle in the figure below. **1 point**



Sample answer: Acute $\angle BEF$; Right $\angle AED$; Obtuse $\angle BED$

