

# Unit 5

## 5.2 Angle Bisectors and Perpendicular Lines

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### Preamble

### Objective

Understand methods to bisect an angle, and be able to identify if two lines are perpendicular

### Definitions

- **angle bisector:** an line (ray, line or segment) that divides an existing angle into 2 equal parts
- **framing square:** a tool used to make right angles.

### Start

### Intro

We have a basic understanding of angles, but there are some things we do with existing angles.

One such method is to bisect the angle, which means to divide the angle into two equal parts.

[Finding bisector activity] - pg. 188

When working with angles, it is important to understand how to calculate these exactly, as you don't want a house off of its foundation by even a couple of degrees. When I was working with my uncle this summer we used a tool called a framing square, or just a square for short. It was a piece of metal with a 90 degree angle in it. We used this all the time to make sure that the wall we were

putting up were right. The human eye can learn to approximate things rather well, but we wanted to make sure it was exact.

[Activity 5.4] - pg. 190

### **Example 1**

1 - pg. 192

### **Example 2**

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### **End**

### **Assignment**

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### **Activity**

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